

(0/764,721

LOGINID: sssptau129pxo

PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?) :2

* * * * * * * * * * * * * Welcome to STN International * * * * * * * * * * *

NEWS 1 Web Page URLs for STN Seminar Schedule - N. America
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STN AnaVist, now available
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NEWS 7 SEP 09 ACD predicted properties enhanced in REGISTRY/ZREGISTRY
NEWS 8 OCT 03 MATHDI removed from STN
NEWS 9 OCT 04 CA/CAplus-Canadian Intellectual Property Office (CIPO) added
to core patent offices
NEWS 10 OCT 06 STN AnaVist workshops to be held in North America
NEWS 11 OCT 13 New CAS Information Use Policies Effective October 17, 2005
NEWS 12 OCT 17 STN(R) AnaVist(TM), Version 1.01, allows the export/download
of CAplus documents for use in third-party analysis and
visualization tools
NEWS 13 OCT 27 Free KWIC format extended in full-text databases
NEWS 14 OCT 27 DIOGENES content streamlined
NEWS 15 OCT 27 EPFULL enhanced with additional content

NEWS EXPRESS JUNE 13 CURRENT WINDOWS VERSION IS V8.0, CURRENT
MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
AND CURRENT DISCOVER FILE IS DATED 13 JUNE 2005

NEWS HOURS STN Operating Hours Plus Help Desk Availability
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NEWS WWW CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

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FILE 'HOME' ENTERED AT 20:11:58 ON 29 OCT 2005

=>

Uploading

THIS COMMAND NOT AVAILABLE IN THE CURRENT FILE

Do you want to switch to the Registry File?

Choice (Y/n) :

Switching to the Registry File...

Some commands only work in certain files. For example, the EXPAND command can only be used to look at the index in a file which has an index. Enter "HELP COMMANDS" at an arrow prompt (=>) for a list of commands which can be used in this file.

=> FILE REGISTRY

| COST IN U.S. DOLLARS | SINCE FILE ENTRY | TOTAL SESSION |
|----------------------|------------------|---------------|
| FULL ESTIMATED COST | 0.63 | 0.63 |

FILE 'REGISTRY' ENTERED AT 20:13:34 ON 29 OCT 2005
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 27 OCT 2005 HIGHEST RN 866318-76-5
DICTIONARY FILE UPDATES: 27 OCT 2005 HIGHEST RN 866318-76-5

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

*
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added, *
* effective March 20, 2005. A new display format, IDERL, is now *
* available and contains the CA role and document type information. *
*

Structure search iteration limits have been increased. See HELP SLIMITS for details.

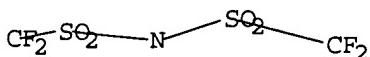
REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/ONLINE/UG/regprops.html>

=>
Uploading C:\Program Files\Stnexp\Queries\141.str

L1 STRUCTURE uploaded

=> d 11
L1 HAS NO ANSWERS
L1 STR



Ag

Structure attributes must be viewed using STN Express query preparation.

```
=> s 11
SAMPLE SEARCH INITIATED 20:13:44 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 1 TO ITERATE

100.0% PROCESSED      1 ITERATIONS          0 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH    **COMPLETE**

PROJECTED ITERATIONS:   1 TO     80
PROJECTED ANSWERS:      0 TO     0

L2      0 SEA SSS SAM L1

=> search 11
ENTER TYPE OF SEARCH (SSS), CSS, FAMILY, OR EXACT:.
ENTER SCOPE OF SEARCH (SAMPLE), FULL, RANGE, OR SUBSET:full
FULL SEARCH INITIATED 20:13:51 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 31 TO ITERATE

100.0% PROCESSED      31 ITERATIONS          0 ANSWERS
SEARCH TIME: 00.00.01

L3      0 SEA SSS FUL L1

=>
Uploading C:\Program Files\Stnexp\Queries\141.str

L4      STRUCTURE uploaded

=> s 11
SAMPLE SEARCH INITIATED 20:14:11 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 1 TO ITERATE

100.0% PROCESSED      1 ITERATIONS          0 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH    **COMPLETE**

PROJECTED ITERATIONS:   1 TO     80
PROJECTED ANSWERS:      0 TO     0

L5      0 SEA SSS SAM L1

=> search 1`1
      1927564 L
      18011892 1
L6      2733 L`1
      (L(W) 1)

=> search 11
ENTER TYPE OF SEARCH (SSS), CSS, FAMILY, OR EXACT:.
ENTER SCOPE OF SEARCH (SAMPLE), FULL, RANGE, OR SUBSET:full
FULL SEARCH INITIATED 20:14:20 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 31 TO ITERATE

100.0% PROCESSED      31 ITERATIONS          0 ANSWERS
SEARCH TIME: 00.00.01
```

L7 0 SEA SSS FUL L1

=>
Uploading C:\Program Files\Stnexp\Queries\141c.str

L8 STRUCTURE UPLOADED

=> s 18
SAMPLE SEARCH INITIATED 20:15:07 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 108 TO ITERATE

100.0% PROCESSED 108 ITERATIONS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

50 ANSWERS

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 1537 TO 2783
PROJECTED ANSWERS: 997 TO 2043

L9 50 SEA SSS SAM L8

=> search 18
ENTER TYPE OF SEARCH (SSS), CSS, FAMILY, OR EXACT:.
ENTER SCOPE OF SEARCH (SAMPLE), FULL, RANGE, OR SUBSET:full
FULL SEARCH INITIATED 20:15:13 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 2565 TO ITERATE

100.0% PROCESSED 2565 ITERATIONS
SEARCH TIME: 00.00.01

1772 ANSWERS

L10 1772 SEA SSS FUL L8

=> file caplus
COST IN U.S. DOLLARS
FULL ESTIMATED COST SINCE FILE ENTRY TOTAL
493.19 493.82
SESSION

FILE 'CAPLUS' ENTERED AT 20:15:28 ON 29 OCT 2005
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
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FILE COVERS 1907 - 29 Oct 2005 VOL 143 / ISS 19
FILE LAST UPDATED: 28 Oct 2005 (20051028/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply.
They are available for your review at:

<http://www.cas.org/infopolicy.html>

=> s sliver or ag

869 SLIVER
304563 AG
L11 305388 SLIVER OR AG

=> s silver or ag
302100 SILVER
304563 AG
L12 430757 SILVER OR AG

=> his
HIS IS NOT A RECOGNIZED COMMAND
The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (>).

=> d his

(FILE 'HOME' ENTERED AT 20:11:58 ON 29 OCT 2005)

FILE 'REGISTRY' ENTERED AT 20:13:34 ON 29 OCT 2005

L1 STRUCTURE UPLOADED
L2 0 S L1
L3 0 SEARCH L1 FULL
L4 STRUCTURE UPLOADED
L5 0 S L1
L6 2733 SEARCH L`1
L7 0 SEARCH L1 FULL
L8 STRUCTURE UPLOADED
L9 50 S L8
L10 1772 SEARCH L8 FULL

FILE 'CAPLUS' ENTERED AT 20:15:28 ON 29 OCT 2005

L11 305388 S SLIVER OR AG
L12 430757 S SILVER OR AG

=> s l10
L13 3838 L10

=> s l13 and l12
L14 160 L13 AND L12

=> d l14 fbib ab hitstr 1-160

L14 ANSWER 1 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2005:1004231 CAPLUS
DN 143:309098
TI Lithium secondary battery
IN Hwang, Duck-chul; Kim, Geun-bae; Park, Yong-chul; Jung, Won-il; Suh, Jun-won; Kim, Jan-dee
PA S. Korea
SO U.S. Pat. Appl. Publ., 14 pp.

CODEN: USXXCO

DT Patent
LA English

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|--|------|----------|-----------------|------------|
| PI | US 2005202316 | A1 | 20050915 | US 2005-78542 | 20050311 |
| | | | | KR 2004-16814 | A 20040312 |
| | JP 2005259703 | A2 | 20050922 | JP 2005-67799 | 20050310 |
| | | | | KR 2004-16814 | A 20040312 |
| AB | Disclosed is a lithium secondary battery including a pos. electrode comprising a combination of pos. active materials. The combination | | | | |

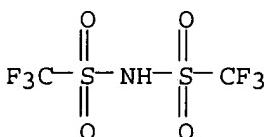
includes a material represented by one or both of Formulas 1 and 2; and a material of Formula 3 as follows: $\text{Li}_{\alpha}\text{Ni}_{\beta}\text{Mn}_{\gamma}\text{Co}_{\delta}\text{O}_2$ (Formula 1) where $0.90 \leq \alpha \leq 1.2$; $0.5 \leq \beta \leq 0.9$; $0 < \gamma < 0.4$; $0 \leq \delta \leq 0.2$; $\text{Li}_{\alpha}\text{Ni}_{\beta}\text{Co}_{\gamma}\text{Mn}_{\delta}\text{O}_2$ (Formula 2) where $0.90 \leq \alpha \leq 1.2$, $0.5 \leq \beta \leq 0.9$, $0 < \gamma < 0.4$, $0 < \delta < 0.4$, and $0 \leq \epsilon \leq 0.2$; $\text{Li}_{\alpha}\text{Co}_{\beta}\text{Mn}_{\gamma}\text{O}_2$ (Formula 3) where $0.90 \leq \alpha \leq 1.2$ and $0 \leq \beta \leq 0.2$; and each M of Formulas 1-3 is independently selected from the group consisting of Mg, Ca, Sr, Ba, Ra, Sc, Y, Ti, Zr, Hf, Rf, V, Nb, Ta, Db, Cr, Mo, W, Sg, Tc, Re, Bh, Fe, Ru, Os, Hs, Rh, Ir, Pd, Pt, Cu, Ag, Au, Zn, Cd, B, Al, Ga, In, Tl, Si, Ge, Sn, P, As, Sb, Bi, S, Se, Te, Po, and combinations.

IT 90076-65-6

RL: DEV (Device component use); USES (Uses)
(lithium secondary battery with improved cycle life and enhanced safety)

RN 90076-65-6 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME)



● Li

L14 ANSWER 2 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2005:780832 CAPLUS

TI 1-Alkyl-3-methylimidazolium Bis(perfluoroalkylsulfonyl)imide Water-Immiscible Ionic Liquids. Electrochemical Properties at Liquid-Liquid interfaces

AU Fitchett, Brian D.; Rollins, Julie B.; Conboy, John C.

CS Department of Chemistry, University of Utah, Salt Lake City, UT, 84112, USA

SO Journal of the Electrochemical Society (2005), 152(8), E251-E258
CODEN: JESOAN; ISSN: 0013-4651

PB Electrochemical Society

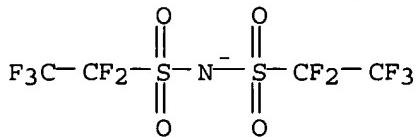
DT Journal

LA English

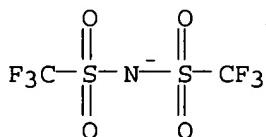
AB This study presents the electrochem. properties of room-temperature ionic liqs. (RTILs) at a variety of liquid-liquid interfaces. The RTILs used here consist of 1-alkyl-3-methylimidazolium (Cn mim , $n = 6, 8, 10, 12$) cations with bis(perfluoromethylsulfonyl)imide (BMSI) and bis(perfluoroethylsulfonyl)imide (BETI) anions. Ion transfer across the polarizable 1,2-dichloroethane/H₂O and the neat RTIL/H₂O interfaces were examined. The ion-transfer expts. suggested that the RTILs made with Cn mim and BMSI or BETI are moderately hydrophobic with polarizable potential windows as large as 274 mV for C12mimBETI in 1,2-dichloroethane and 137 mV for the neat C12mimBETI/H₂O interface. The effect of the junction potential at the aqueous Ag/AgCl reference electrode/RTIL interface was studied using the oxidation/reduction of ferrocene and decamethylferrocene. The junction potential at the reference electrode decreases as a function of the cation chain length for both anions studied. The $\Delta G_{\text{transfer}}$ found for all the systems studied was .apprx.3 kJ/mol per CH₂ group of the cation.

IT 129318-46-3

RL: PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); PROC (Process)
 (BETI; transfer potential at dichloroethane-water interface)
 RN 129318-46-3 CAPLUS
 CN Ethanesulfonamide, 1,1,2,2,2-pentafluoro-N-[(pentafluoroethyl)sulfonyl]-,
 ion(1-) (9CI) (CA INDEX NAME)



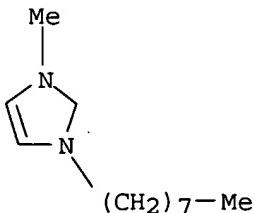
IT 98837-98-0
 RL: PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); PROC (Process)
 (BMSI; transfer potential at dichloroethane-water interface)
 RN 98837-98-0 CAPLUS
 CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-,
 ion(1-) (9CI) (CA INDEX NAME)



IT 178631-04-4 382150-50-7 404001-48-5
 433337-23-6 530084-99-2 750571-84-7
 750571-85-8
 RL: NUU (Other use, unclassified); PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); PROC (Process); USES (Uses)
 (water-immiscible ionic liquid; electrochem. properties and ion transfer across polarizable liquid-liquid interfaces)
 RN 178631-04-4 CAPLUS
 CN 1H-Imidazolium, 1-methyl-3-octyl-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

CM 1

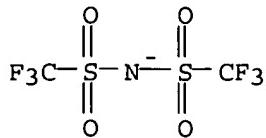
CRN 178631-03-3
CMF C12 H23 N2



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

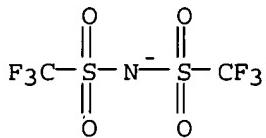
CRN 98837-98-0
CMF C2 F6 N O4 S2



RN 382150-50-7 CAPLUS
CN 1H-Imidazolium, 1-hexyl-3-methyl-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

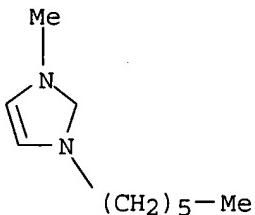
CM 1

CRN 98837-98-0
CMF C2 F6 N O4 S2



CM 2

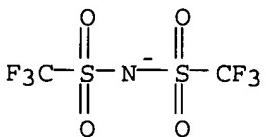
CRN 85100-82-9
CMF C10 H19 N2



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
RN 404001-48-5 CAPLUS
CN 1H-Imidazolium, 1-dodecyl-3-methyl-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

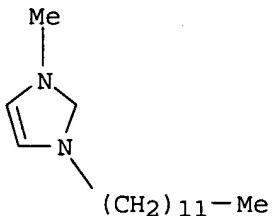
CM 1

CRN 98837-98-0
CMF C2 F6 N O4 S2



CM 2

CRN 46928-10-3
CMF C16 H31 N2



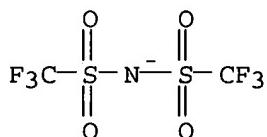
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 433337-23-6 CAPLUS

CN 1H-Imidazolium, 1-decyl-3-methyl-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

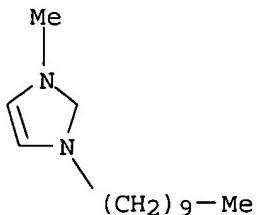
CM 1

CRN 98837-98-0
CMF C2 F6 N O4 S2



CM 2

CRN 81994-88-9
CMF C14 H27 N2



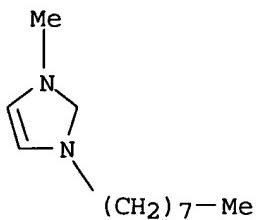
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 530084-99-2 CAPLUS

CN 1H-Imidazolium, 1-methyl-3-octyl-, salt with 1,1,2,2,2-pentafluoro-N-[(pentafluoroethyl)sulfonyl]ethanesulfonamide (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 178631-03-3
CMF C12 H23 N2

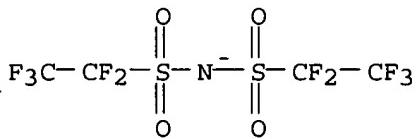


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 129318-46-3

CMF C4 F10 N O4 S2



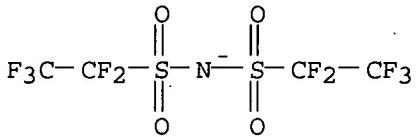
RN 750571-84-7 CAPLUS

CN 1H-Imidazolium, 1-hexyl-3-methyl-, salt with 1,1,2,2,2-pentafluoro-N-[(pentafluoroethyl)sulfonyl]ethanesulfonamide (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 129318-46-3

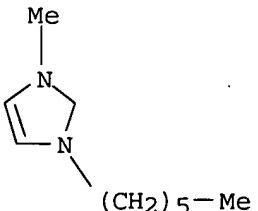
CMF C4 F10 N O4 S2



CM 2

CRN 85100-82-9

CMF C10 H19 N2



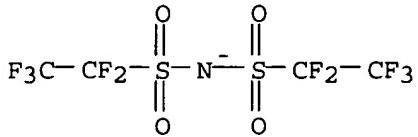
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 750571-85-8 CAPLUS

CN 1H-Imidazolium, 1-decyl-3-methyl-, salt with 1,1,2,2,2-pentafluoro-N-[(pentafluoroethyl)sulfonyl]ethanesulfonamide (1:1) (9CI) (CA INDEX NAME)

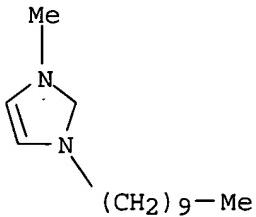
CM 1

CRN 129318-46-3
CMF C4 F10 N O4 S2



CM 2

CRN 81994-88-9
CMF C14 H27 N2



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
RE.CNT 61 THERE ARE 61 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 3 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2005:735154 CAPLUS
DN 143:196855
TI Protected active metal electrode and battery cell structures with
nonaqueous interlayer architecture
IN Visco, Steven J.; Katz, Bruce D.; Nimon, Yevgeniy S.; De Jonghe, Lutgard
C.
PA Polyplus Battery Company, USA
SO U.S. Pat. Appl. Publ., 20 pp.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---------------|---|----------|--|--------------------------------------|
| PI | US 2005175894 | A1 | 20050811 | US 2004-824944
US 2004-542532P
US 2004-548231P | 20040414
P 20040206
P 20040227 |
| | WO 2005083829 | A2 | 20050909 | WO 2004-US33371 | 20041008 |
| | W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | |
| | RW: | BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, | | | |

SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
SN, TD, TG

US 2004-542532P P 20040206
US 2004-548231P P 20040227
US 2004-824944 A 20040414

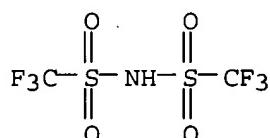
AB The invention concerns active metal and active metal intercalation electrode structures and battery cells having ionically conductive protective architecture including an active metal (e.g., lithium) conductive impervious layer separated from the electrode (anode) by a porous separator impregnated with a non-aqueous electrolyte (anolyte). This protective architecture prevents the active metal from deleterious reaction with the environment on the other (cathode) side of the impervious layer, which may include aqueous or nonaq. liquid electrolytes (catholytes) and/or a variety electrochem. active materials, including liquid, solid and gaseous oxidizers. Safety additives and designs that facilitate manufacture are also provided.

IT 90076-65-6 132843-44-8

RL: DEV (Device component use); USES (Uses)
(protected active metal electrode and battery cell structures with
nonaq. interlayer architecture)

RN 90076-65-6 CAPLUS

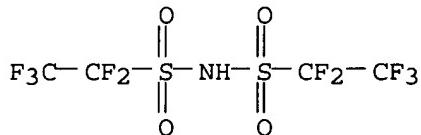
CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-,
lithium salt (9CI) (CA INDEX NAME)



● Li

RN 132843-44-8 CAPLUS

CN Ethanesulfonamide, 1,1,2,2,2-pentafluoro-N-[(pentafluoroethyl)sulfonyl]-,
lithium salt (9CI) (CA INDEX NAME)



● Li

L14 ANSWER 4 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2005:693713 CAPLUS

DN 143:157626

TI Method of ion exchange in solids by dry processes

IN Yano, Satoshi

PA Rikogaku Shinkokai, Japan

SO Jpn. Kokai Tokkyo Koho, 7 pp.

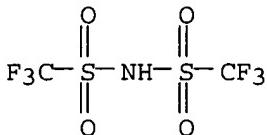
CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---|------|----------|--------------------------------|----------------------|
| PI | JP 2005206406 | A2 | 20050804 | JP 2004-13244
JP 2004-13244 | 20040121
20040121 |
| AB | The method involves the following steps: (1) forming a solid electrolyte film containing ions to be introduced on at least part of the surface of a solid containing ions to be exchanged and then heat-treating or applying elec. field for ion exchange between the electrolyte and the solid. Desired ions are exchanged by dry processes. Formation of complicated ion-exchanged patterns can be easily formed by the method. | | | | |
| IT | 90076-65-6, Lithium bis(trifluoromethanesulfonyl)imide
RL: NUU (Other use, unclassified); USES (Uses)
(polysiloxane complexes; method of ion exchange in solids by dry processes using solid electrolyte film) | | | | |
| RN | 90076-65-6 CAPLUS | | | | |
| CN | Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME) | | | | |



● Li

L14 ANSWER 5 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2005:638669 CAPLUS
 DN 143:145190
 TI Synthesis of ionic liquids
 IN Dai, Sheng; Luo, Huimin
 PA UT-Battelle, Llc., USA
 SO PCT Int. Appl., 21 pp.
 CODEN: PIXXD2

DT Patent
 LA English

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|--|------|----------|-----------------|----------|
| PI | WO 2005065398 | A2 | 20050721 | WO 2004-US44011 | 20041229 |
| | W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT,
RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,
MR, NE, SN, TD, TG | | | | |

US 2003-749450 A 20031231

AB Ionic compds. which are liqs. at room temperature are formed by the method of mixing a neutral organic ligand with the salt of a metal cation and its conjugate anion. Thus, mixing neat cyclohexyl-15-crown-5 (L) with N-lithiobis(trifluoromethane)sulfonimide (LiN(Tf)2) and warming afforded the ionic liquid Li+(L) N-(Tf)2. Also, reaction of alkylamines (R1NH2 and

R₂NH₂ where R₁ and R₂ = same or different alkyl) with AgNO₃ in water at room temperature, followed by addition of LiN(Tf)₂ afforded ionic liqs. [Ag (NH₂R₁) (NH₂R₂)] [N(Tf)₂]. The liqs. are hydrophobic, conductive and stable, and may be used as solvent, for solvent extraction, gas-liquid separation,

used in electrochem. devices, and used as a heat transfer fluid.

IT 90076-65-6, Lithium bis(trifluoromethane)sulfonimide

98837-98-0D, salt

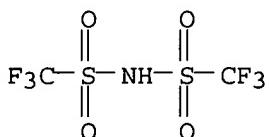
RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of room temperature hydrophobic ionic liqs. from mixing neutral organic

ligand with salt of metal cation and its conjugate anion)

RN 90076-65-6 CAPLUS

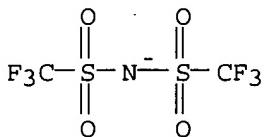
CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME)



● Li

RN 98837-98-0 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, ion(1-) (9CI) (CA INDEX NAME)



IT 858101-34-5P 858101-35-6P 858101-36-7P

858101-37-8P 858101-39-0P 858101-41-4P

858101-43-6P 858101-45-8P 858101-47-0P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of room temperature hydrophobic ionic liqs. from mixing neutral organic

ligand with salt of metal cation and its conjugate anion)

RN 858101-34-5 CAPLUS

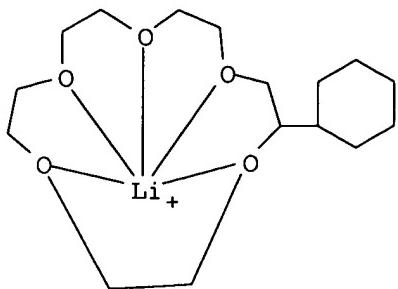
CN INDEX NAME NOT YET ASSIGNED

CM 1

CRN 858101-33-4

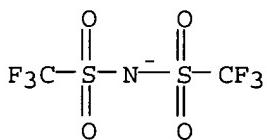
CMF C16 H30 Li O5

CCI CCS



CM 2

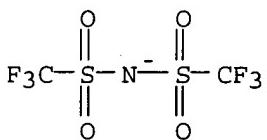
CRN 98837-98-0
CMF C2 F6 N O4 S2



RN 858101-35-6 CAPLUS
CN Silver(1+), bis(1-propanamine)-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

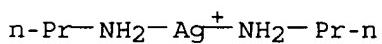
CM 1

CRN 98837-98-0
CMF C2 F6 N O4 S2



CM 2

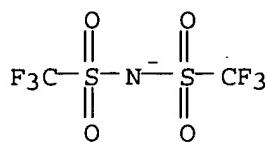
CRN 15907-07-0
CMF C6 H18 Ag N2
CCI CCS



RN 858101-36-7 CAPLUS
CN Silver(1+), bis(ethanamine)-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 98837-98-0
CMF C2 F6 N O4 S2



CM 2

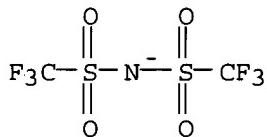
CRN 18080-03-0
 CMF C4 H14 Ag N2
 CCI CCS



RN 858101-37-8 CAPLUS
 CN Silver(1+), bis(methanamine)-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 98837-98-0
 CMF C2 F6 N O4 S2



CM 2

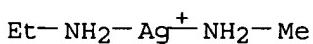
CRN 16972-62-6
 CMF C2 H10 Ag N2
 CCI CCS



RN 858101-39-0 CAPLUS
 CN Silver(1+), (ethanamine)(methanamine)-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

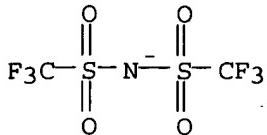
CM 1

CRN 858101-38-9
 CMF C3 H12 Ag N2
 CCI CCS



CM 2

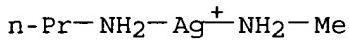
CRN 98837-98-0
CMF C2 F6 N O4 S2



RN 858101-41-4 CAPLUS
CN Silver(1+), (methanamine) (1-propanamine)-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

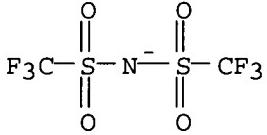
CM 1

CRN 858101-40-3
CMF C4 H14 Ag N2
CCI CCS



CM 2

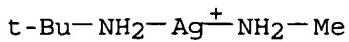
CRN 98837-98-0
CMF C2 F6 N O4 S2



RN 858101-43-6 CAPLUS
CN Silver(1+), (methanamine) (2-methyl-2-propanamine)-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

CM 1

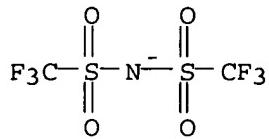
CRN 858101-42-5
CMF C5 H16 Ag N2
CCI CCS



CM 2

CRN 98837-98-0

CMF C2 F6 N O4 S2



RN 858101-45-8 CAPLUS

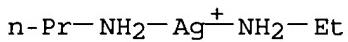
CN Silver(1+), (ethanamine) (1-propanamine)-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 858101-44-7

CMF C5 H16 Ag N2

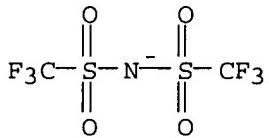
CCI CCS



CM 2

CRN 98837-98-0

CMF C2 F6 N O4 S2



RN 858101-47-0 CAPLUS

CN Silver(1+), (2-methyl-2-propanamine) (1-propanamine)-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 858101-46-9

CMF C7 H20 Ag N2

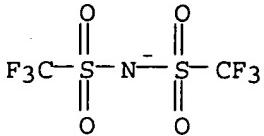
CCI CCS



CM 2

CRN 98837-98-0

CMF C2 F6 N O4 S2



L14 ANSWER 6 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2005:606083 CAPLUS
 DN 143:117823
 TI Facilitated transport membranes for an alkene hydrocarbon separation
 IN Kang, Yong Soo; Jung, Bumsuk; Kim, Jong Hak; Won, Jongok; Char, Kook Heon;
 Kang, Sang Wook
 PA Korea Institute of Science and Technology, S. Korea
 SO Eur. Pat. Appl., 12 pp.
 CODEN: EPXXDW

DT Patent
 LA English

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---|------|----------|-----------------|------------|
| PI | EP 1552875 | A1 | 20050713 | EP 2004-30656 | 20041223 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK,
BA, HR, IS, YU | | | | |
| US | 2005150383 | A1 | 20050714 | KR 2004-1065 | A 20040108 |
| | | | | US 2004-11235 | 20041213 |
| | | | | KR 2004-1065 | A 20040108 |
| JP | 2005193233 | A2 | 20050721 | JP 2004-375998 | 20041227 |
| | | | | KR 2004-1065 | A 20040108 |

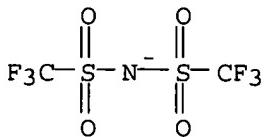
AB There is provided a facilitated transport membrane for separating alkene hydrocarbon comprising a solid polymer electrolyte layer consisting a transition metal salt, a polymer, an ionic liquid, and a porous supported membrane. The facilitated transport membrane of the present invention shows high selectivity and permeability for the alkene hydrocarbon. It further maintains the complex's activity as a carrier during a long operation, wherein the complex is formed by an interaction of the transition metal ion with the polymer ligand within the solid polymer electrolyte.

IT 98837-98-0

RL: TEM (Technical or engineered material use); USES (Uses)
 (facilitated transport membranes for an alkene hydrocarbon separation)

RN 98837-98-0 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, ion(1-) (9CI) (CA INDEX NAME)



RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 7 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2005:522626 CAPLUS
 DN 143:35151
 TI Chemically amplified positive-working far-UV photoresists and their patterning method

IN Kodama, Kunihiko
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 49 pp.
CODEN: JKXXAF

DT Patent
LA Japanese
FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------|-------|----------|----------------------------------|----------------------|
| ----- | ----- | ----- | ----- | ----- |
| PI JP 2005156821 | A2 | 20050616 | JP 2003-393871
JP 2003-393871 | 20031125
20031125 |

OS MARPAT 143:35151

AB The photoresists contain polymers having single-ring or polycyclic alicyclic hydrocarbon structure and increasing solubility in alkaline developers

upon acid action, and sulfonium salt photoacid generators I [Y1 = aryl, (cyclo)alkyl, alkenyl; Y2 = aryl, (cyclo)alkyl; RX1-2 = H, alkyl, aryl, aralkyl; RY1-2 = H, alkyl, aryl; Ar1 = aryl; X- = non-nucleophilic anion; n = 0-2; Ar1 and Y2, RX1 and RX2, Y1 and RX, Y1 and RY1, and Y1 and RY2 may form a ring]. The photoresists provide good profile patterns regardless of the temperature of post-exposure baking.

IT 853007-12-2

RL: CAT (Catalyst use); TEM (Technical or engineered material use); USES (Uses)

(photoacid generator; in chemical amplified pos.-working far-UV photoresist containing sulfonium salt photoacid generator and its lithog.)

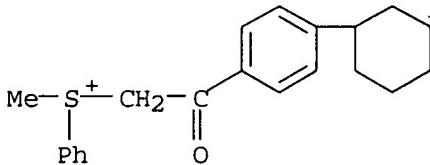
RN 853007-12-2 CAPLUS

CN Sulfonium, [2-(4-cyclohexylphenyl)-2-oxoethyl]methylphenyl-, salt with 1,1,2,2,3,3,4,4,4-nonafluoro-N-[(nonafluorobutyl)sulfonyl]-1-butanesulfonamide (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 666256-64-0

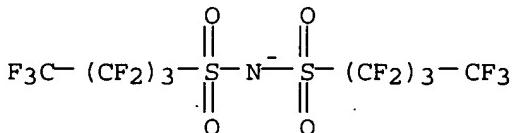
CMF C21 H25 O S



CM 2

CRN 191101-38-9

CMF C8 F18 N O4 S2

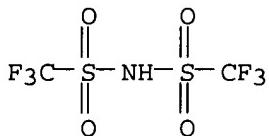


L14 ANSWER 8 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2005:521397 CAPLUS

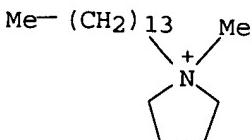
DN 143:214241

TI Recent developments in the ENEA lithium metal battery project
 AU Shin, J.-H.; Henderson, W. A.; Appeteccchi, G. B.; Alessandrini, F.;
 Passerini, S.
 CS ENEA, IDROCOMB (Hydrogen and Fuel Cell Division), Casaccia Research
 Center, Rome, 00060, Italy
 SO Electrochimica Acta (2005), 50(19), 3859-3865
 CODEN: ELCAAV; ISSN: 0013-4686
 PB Elsevier B.V.
 DT Journal
 LA English
 AB Solvent-free P(EO)20LiTFSI + PYR14TFSI polymer electrolyte films with PYR14+/Li+ mole ratios ranging from 0.96 to 3.22 were prepared by hot-pressing mixts. composed of PEO, LiTFSI and PYR14TFSI with selected stoichiometries. The PYR14TFSI room temperature ionic liquid (RTIL) is homogeneously incorporated into the P(EO)20LiTFSI membrane without phase separation. For a PYR14+/Li+ mole ratio of 3.22, the ionic conductivity was .apprx.2 + 10-4 S/cm at 20°, i.e., more than one order of magnitude higher than that of the RTIL-free electrolyte. The electrochem. stability window of the polymer electrolyte containing the RTIL was .apprx.6 V (vs. Ag/Ag+). Li/V2O5 cells with the polymer electrolyte (PYR14+/Li+ = 1.92) showed a 60% capacity retention after 80 cycles at 40° (the initial capacity was 210 mA-h/g). Li/V2O5 cells (PYR14+/Li+ = 1.28) held at 30° delivered .apprx.93 mA-h/g (at 0.057 mA/cm2), which corresponds to .apprx.34% use of the active material. The incorporation of a RTIL into PEO-based polymer electrolytes is promising for realization of solid-state Li polymer batteries operating near ambient temps.
 IT 90076-65-6 862464-51-5
 RL: DEV (Device component use); PRP (Properties); USES (Uses)
 (in electrolyte for high-energy d. lithium batteries)
 RN 90076-65-6 CAPPLUS
 CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME)



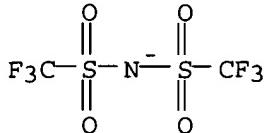
● Li

RN 862464-51-5 CAPPLUS
 CN Pyrrolidinium, 1-methyl-1-tetradecyl-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)
 CM 1
 CRN 111413-53-7
 CMF C19 H40 N



CM 2

CRN 98837-98-0
CMF C2 F6 N O4 S2



RE.CNT 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 9 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2005:496984 CAPLUS
DN 143:27787
TI Optical filters with good light resistance for displays
IN Nakatsugawa, Yuji
PA Dainippon Printing Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 19 pp.
CODEN: JKXXAF

DT Patent
LA Japanese
FAN.CNT 2

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---------------|------|----------|-----------------|------------|
| PI | JP 2005148283 | A2 | 20050609 | JP 2003-383685 | 20031113 |
| | US 2005163958 | A1 | 20050728 | US 2004-972086 | 20041022 |
| | | | | JP 2003-383685 | A 20031113 |
| | | | | JP 2003-403851 | A 20031202 |
| | | | | JP 2004-74119 | A 20040316 |

PATENT FAMILY INFORMATION:

FAN 2005:672651

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---------------|------|----------|-----------------|------------|
| PI | US 2005163958 | A1 | 20050728 | US 2004-972086 | 20041022 |
| | | | | JP 2003-383685 | A 20031113 |
| | | | | JP 2003-403851 | A 20031202 |
| | | | | JP 2004-74119 | A 20040316 |
| | JP 2005148283 | A2 | 20050609 | JP 2003-383685 | 20031113 |
| | JP 2005301191 | A2 | 20051027 | JP 2004-142382 | 20040512 |
| | | | | JP 2004-74119 | A 20040316 |

OS MARPAT 143:27787

AB Title filters with light transmittance $\leq 30\%$ at <380 nm comprise a transparent substrate, a near IR absorbing layer containing a transparent binder and near IR absorbing colorant, and a UV absorbing layer. Thus, a near IR absorbing coating composition comprising 20% Dianal BR 80, 0.2 mmol/L N,N'-2,5-cyclohexadiene-1,4-diylidenebis[4-(dibutylamino)-N-[4-(dibutylamino)phenyl]]-benzenaminium 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide salt obtained from N,N,N',N'-tetrakis(aminophenyl)-p-phenylenediamine, Bu bromide, and silver bis(trifluoromethanesulfonyl)imide near IR absorbing colorant (preparation given), and 0.2 mmol/L Excolor IR 1 (phthalocyanine type colorant) was applied on a A 4300 (polyethylene terephthalate) film, dried at 100° for 1 min, LU 0400 (UV absorbing filter) was placed thereon and laminated to give an optical filter with good light resistance.

IT 536741-75-0P

RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)

(near IR absorber; optical filters with good light resistance for displays)

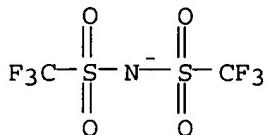
RN 536741-75-0 CAPLUS

CN Benzenaminium, N,N'-2,5-cyclohexadiene-1,4-diylidenebis[4-(dibutylamino)-N-[4-(dibutylamino)phenyl]-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:2) (9CI) (CA INDEX NAME)

CM 1

CRN : 98837-98-0

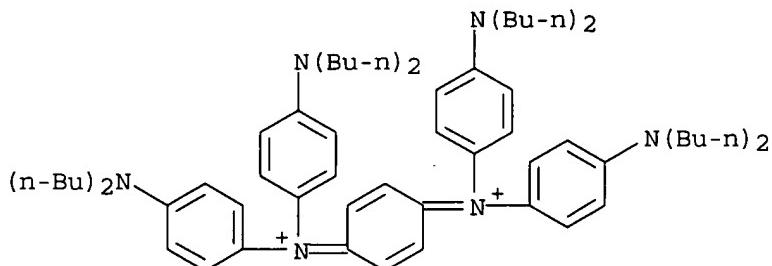
CMF C2 F6 N O4 S2



CM 2

CRN 47911-98-8

CMF C62 H92 N6



L14 ANSWER 10 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2005:434426 CAPLUS

DN 143:232580

TI New fluorine-containing plasticized low lattice energy lithium salt for plastic batteries

AU Mandal, Braja K.; Filler, Robert

CS Department of Biological, Chemical and Physical Sciences, Illinois Institute of Technology, Chicago, IL, 60616, USA

SO Journal of Fluorine Chemistry (2005), 126(5), 845-848
CODEN: JFLCAR; ISSN: 0022-1139

PB Elsevier B.V.

DT Journal

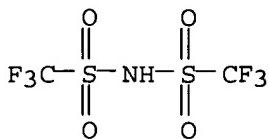
LA English

AB The synt

structurally related to lithium bis(trifluoromethylsulfonyl)imide (LiTFSI), is described. Incorporation of the plasticizing moiety in a single salt mol. greatly simplifies the solid polymer electrolyte (SPE) processing formulation without compromising performance. Thermally and electrochem. stable polymer electrolyte films of PLI exhibit good ionic conductivity, though somewhat lower than that for LiTFSI. The

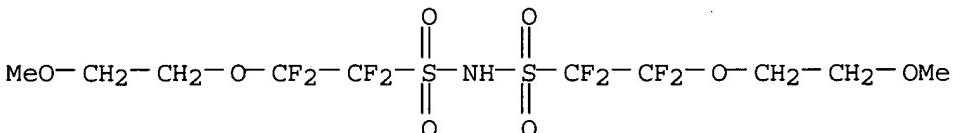
pentafluorophenyl analog of LiTFSI, prepared by two approaches, exhibits behavior similar to that of LiTESI.

IT **90076-65-6**, Lithium bis(trifluoromethylsulfonyl)imide
 RL: DEV (Device component use); PRP (Properties); USES (Uses)
 (composites with PEO; new fluorine-containing plasticized low lattice
 energy lithium salt for plastic batteries)
 RN 90076-65-6 CAPLUS
 CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-,
 lithium salt (9CI) (CA INDEX NAME)



● Li

IT **862851-62-5P**
 RL: PEP (Physical, engineering or chemical process); PRP (Properties); PYP
 (Physical process); SPN (Synthetic preparation); PREP (Preparation); PROC
 (Process)
 (composites with PEO; new fluorine-containing plasticized low lattice
 energy lithium salt for plastic batteries)
 RN 862851-62-5 CAPLUS
 CN Ethanesulfonamide, 1,1,2,2-tetrafluoro-2-(2-methoxyethoxy)-N-[[1,1,2,2-
 tetrafluoro-2-(2-methoxyethoxy)ethyl]sulfonyl]-, lithium salt (9CI) (CA
 INDEX NAME)



● Li

RE.CNT 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 11 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2005:394639 CAPLUS
 DN 142:449374
 TI Anode for lithium metal battery
 IN Kim, Hee-Tak; Choi, Su-Suk; Choi, Yun-Suk; Cheon, Sang-Eun; Han, Ji-Seong
 PA S. Korea
 SO U.S. Pat. Appl. Publ., 16 pp.
 CODEN: USXXCO
 DT Patent
 LA English
 FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---------------|------|----------|-----------------|------------|
| PI | US 2005095504 | A1 | 20050505 | US 2004-962636 | 20041011 |
| | | | | KR 2003-76907 | A 20031031 |
| | JP 2005142156 | A2 | 20050602 | JP 2004-318456 | 20041101 |
| | | | | KR 2003-76907 | A 20031031 |

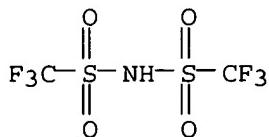
AB The present invention relates to a neg. electrode for a lithium metal battery and a lithium metal battery comprising the same. The neg. electrode of the present invention comprises a neg. active material layer of metallic lithium or a lithium alloy, and a passivation layer formed on the neg. active material layer. The passivation layer has a structure comprising a 3-dimensionally cross-linked polymer network matrix penetrated by linear polymers. The passivation layer formed on the surface of the neg. electrode reduces reactivity of the neg. electrode and stabilizes the surface, so that it offers a lithium metal battery having superior life cycle characteristics.

IT 90076-65-6

RL: DEV (Device component use); USES (Uses)
(anode for lithium metal battery)

RN 90076-65-6 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME)



● Li

L14 ANSWER 12 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2005:302143 CAPLUS

DN 142:338021

TI Cellulose compositions, their films, and agents for decreasing optical anisotropy of the films

IN Sasada, Yasuyuki

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 22 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---------------|------|----------|-----------------|----------|
| PI | JP 2005089689 | A2 | 20050407 | JP 2003-327761 | 20030919 |
| | | | | JP 2003-327761 | 20030919 |

OS MARPAT 142:338021

AB The compns. contain ionic liqs., e.g., imidazolium salts I [R1-R5 = H, alkyl, aryl, heterocyclyl, aralkyl; X- = N(CF₃SO₂)₂-, C(CF₃SO₂)₃-, CF₃SO₃-, etc.] for decreasing optical anisotropy. The films are useful for silver halide photog. materials, liquid crystal displays, etc. Thus, a 80-μm thick cellulose triacetate film containing I [R1 = Me, R3 = Et, R2 = R4 = R5 = H, X- = N(CF₃SO₂)₂-] showed optical retardation 43 nm.

IT 174899-81-1 174899-82-2 174899-88-8

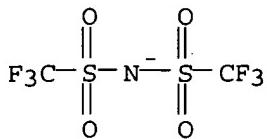
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)

(cellulose compns. containing ionic liqs. for decreasing optical anisotropy for films)

RN 174899-81-1 CAPLUS

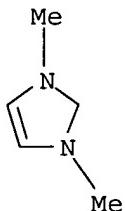
CN 1H-Imidazolium, 1,3-dimethyl-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

CRN 98837-98-0
CMF C2 F6 N O4 S2



CM 2

CRN 45470-32-4
CMF C5 H9 N2



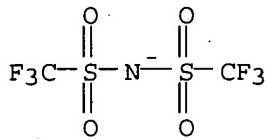
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 174899-82-2 CAPLUS

CN 1H-Imidazolium, 1-ethyl-3-methyl-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

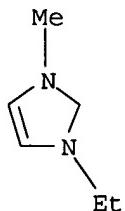
CM 1

CRN 98837-98-0
CMF C2 F6 N O4 S2



CM 2

CRN 65039-03-4
CMF C6 H11 N2



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

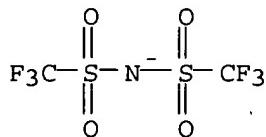
RN 174899-88-8 CAPLUS

CN 1H-Imidazolium, 1,3-diethyl-, salt with 1,1,1-trifluoro-N-[
[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 98837-98-0

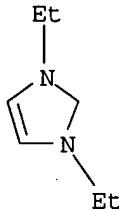
CMF C2 F6 N O4 S2



CM 2

CRN 67711-49-3

CMF C7 H13 N2



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

L14 ANSWER 13 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2005:281124 CAPLUS

DN 142:345283

TI Laminated optical filters with excellent electromagnetic- and near-IR-shielding properties, transparency, and heat and moisture resistance and displays using them

IN Nakatsugawa, Yuji; Inoue, Isao; Tsuzuki, Atsuro; Shibata, Takayuki

PA Dainippon Printing Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 25 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

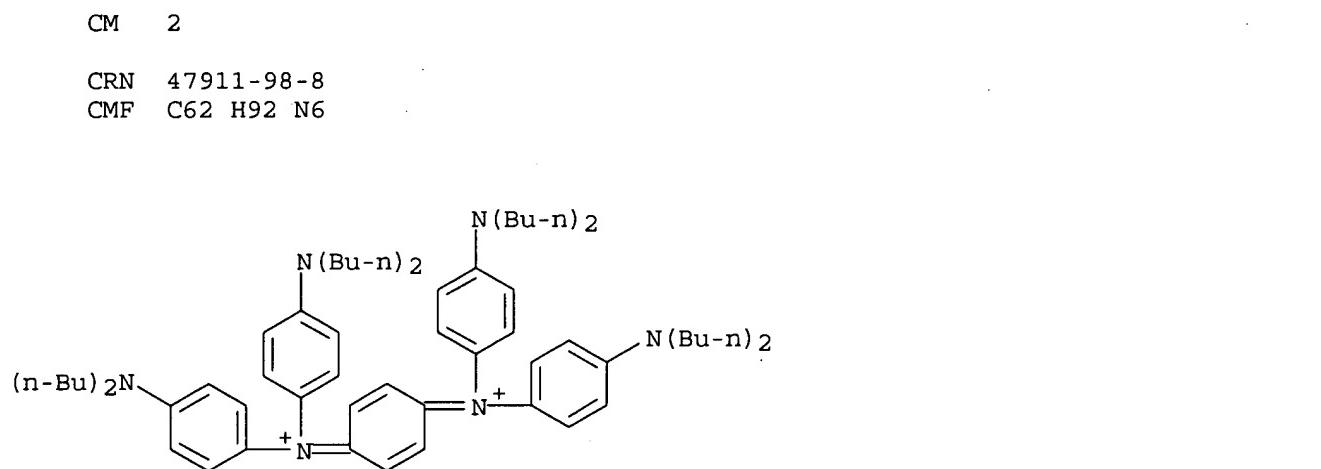
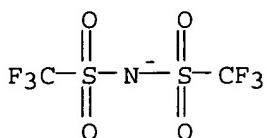
FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------|-------|----------|----------------------------------|----------------------|
| ----- | ----- | ----- | ----- | ----- |
| PI JP 2005084475 | A2 | 20050331 | JP 2003-317987
JP 2003-317987 | 20030910
20030910 |

OS MARPAT 142:345283

AB The filters with haze $\leq 3\%$, especially useful for PDP, have antireflective layers (A), transparent conductive mesh layers (B), transparent adhesive layers (C) for bonding A and B, and transparentizing layers (D) between B and C for improving haze and transparency, wherein ≥ 1 of the layers contain ≥ 1 near-IR-absorbing dyes and/or neon light-absorbing dyes and binder polymers with OH value ≤ 10 . The filters may have impact-resistant layers, antisoiling layers, or adhesive layers on either or both surfaces.

IT 536741-75-0P
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (near-IR-absorbing dye; laminated optical filters for PDP with good electromagnetic- and near-IR-shielding properties, transparency, and durability)
 RN 536741-75-0 CAPPLUS
 CN Benzenaminium, N,N'-2,5-cyclohexadiene-1,4-diylidenebis[4-(dibutylamino)-N-[4-(dibutylamino)phenyl]-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:2) (9CI) (CA INDEX NAME)
 CM 1
 CRN 98837-98-0
 CMF C2 F6 N O4 S2



L14 ANSWER 14 OF 160 CAPPLUS COPYRIGHT 2005 ACS on STN
 AN 2005:281123 CAPPLUS
 DN 142:363903
 TI Optical filters and displays using them with excellent green light transmittance, near-IR-shielding properties, and heat and moisture resistance
 IN Nakatsugawa, Yuji
 PA Dainippon Printing Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 24 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|-------|----------|----------------------------------|----------------------|
| ----- | ----- | ----- | ----- | ----- |
| PI JP 2005084474 | A2 | 20050331 | JP 2003-317986
JP 2003-317986 | 20030910
20030910 |
| OS MARPAT 142:363903 | | | | |
| AB The filters, especially useful for PDP, consist of transparent substrates and | | | | |

transparent polymer layers containing near-IR-absorbing dyes and satisfy that T (light transmittance at 545 nm) \geq 60% and the ratio of T to the maximum light transmittance in the range of 435-455 and 610-630 nm, (1.15-1):1 and (1.15-1):1, resp. The filters may have antisoiling layers, metal mesh layers, adhesive layers, antireflective layers, or antiglare layers on either or both surfaces.

IT 536741-75-0P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (near-IR-absorbing dye; optical filters containing near-IR-absorbing dyes for PDP with good contrast and heat and moisture resistance)

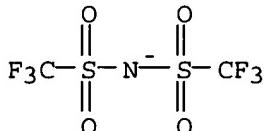
RN 536741-75-0 CAPLUS

CN Benzenaminium, N,N'-2,5-cyclohexadiene-1,4-diylidenebis[4-(dibutylamino)-N-[4-(dibutylamino)phenyl]-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:2) (9CI) (CA INDEX NAME)

CM 1

CRN 98837-98-0

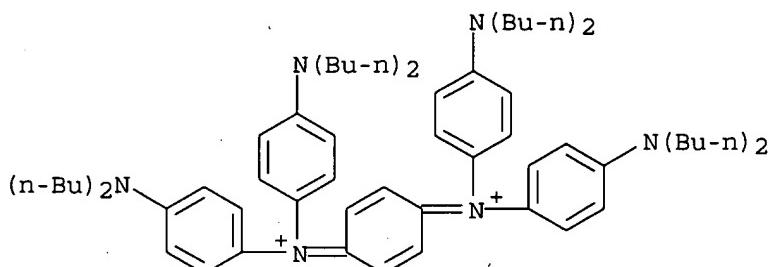
CMF C2 F6 N O4 S2



CM 2

CRN 47911-98-8

CMF C62 H92 N6



L14 ANSWER 15 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2005:275941 CAPLUS

DN 142:363767

TI Stimuli-sensitive photoresists, acid or radical generators therefor, and patterning thereof

IN Kodama, Kunihiko

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 81 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO.

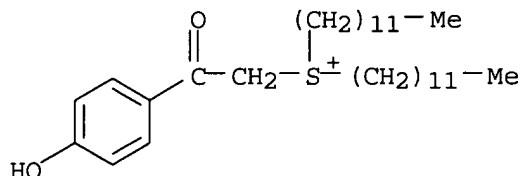
KIND

DATE

APPLICATION NO.

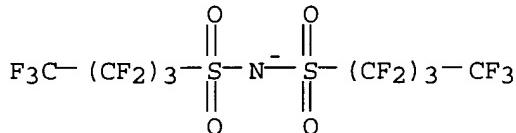
DATE

PI JP 2005084240 A2 20050331 JP 2003-314219 20030905
 OS MARPAT 142:363767 JP 2003-314219 20030905
 AB Compds. generating acids or radicals by external stimulation, represented
 by $(OH)nArCOCR1R2S+Y1Y2X-$ [Ar = aryl; R1, R2 = H, (cyclo)alkyl, aryl; Y1,
 Y2 = (cyclo)alkyl, aryl; n = 1-3; X- = nucleophilic anion], are claimed.
 Photoresists containing the compds. and photolithog. patterning thereon are
 sep. claimed. The photoresists exhibit less dependency of pattern
 precision on post-exposure bake (PEB) temperature
 IT 848864-00-6
 RL: CAT (Catalyst use); TEM (Technical or engineered material use); USES
 (Uses)
 (photoacid generators; stimuli-sensitive photoacid generators for
 photoresists with small PEB temperature dependency)
 RN 848864-00-6 CAPLUS
 CN Sulfonium, didodecyl[2-(4-hydroxyphenyl)-2-oxoethyl]-, salt with
 1,1,2,2,3,3,4,4,4-nonafluoro-N-[(nonafluorobutyl)sulfonyl]-1-
 butanesulfonamide (1:1) (9CI) (CA INDEX NAME)
 CM 1
 CRN 848863-94-5
 CMF C32 H57 O2 S



CM 2

CRN 191101-38-9
 CMF C8 F18 N 04 S2



L14 ANSWER 16 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2005:248866 CAPLUS
 DN 143:10502
 TI Plastic crystal electrolytes based on a polar, neutral matrix
 IN Abu-Lebdeh, Yaser; Armand, Michel; Alarco, Pierre-Jean
 PA Can.
 SO Can. Pat. Appl., 27 pp.
 CODEN: CPXXEB
 DT Patent
 LA English
 FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|------------------------------------|----------------------|
| PI CA 2435218 | AA | 20050128 | CA 2003-2435218
CA 2003-2435218 | 20030728
20030728 |

AB In the present invention, neutral organic or inorg. mols. with a high dipole moment are used as a solid matrix for inorg. salts in order to give high ionic conductivity of "ions-of -interest". The plastic crystalline phase of the solid

matrixes covers a wide range of temps., which allows for the design of ionic conductors working at the required operating temperature of the devices.

IT 90076-65-6 90076-67-8 165324-08-3

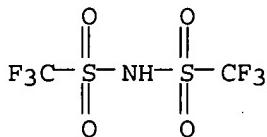
165324-09-4 168106-22-7

RL: DEV (Device component use); USES (Uses)

(plastic crystal electrolytes based on a polar, neutral matrix for secondary lithium batteries or photoelectrochem cells)

RN 90076-65-6 CAPLUS

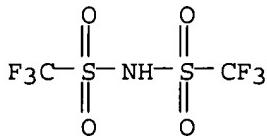
CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME)



● Li

RN 90076-67-8 CAPLUS

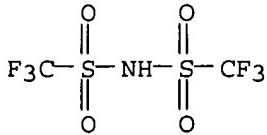
CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, potassium salt (9CI) (CA INDEX NAME)



● K

RN 165324-08-3 CAPLUS

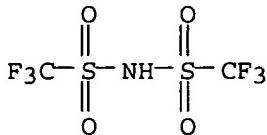
CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, ammonium salt (9CI) (CA INDEX NAME)



● NH₃

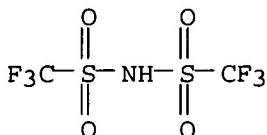
RN 165324-09-4 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, calcium salt (9CI) (CA INDEX NAME)



● 1/2 Ca

RN 168106-22-7 CAPLUS
 CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, barium salt (9CI) (CA INDEX NAME)



● 1/2 Ba

L14 ANSWER 17 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2005:219901 CAPLUS

DN 142:306221

TI Antireflection film for plasma display

IN Naito, Nobuo; Arakawa, Fumihiro; Masaki, Tadahiro

PA Dai Nippon Printing Co., Ltd., Japan

SO PCT Int. Appl., 34 pp.

CODEN: PIXXD2

DT Patent

LA Japanese

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---|------|----------|-----------------|----------|
| PI | WO 2005022212 | A1 | 20050310 | WO 2004-JP12490 | 20040830 |
| | W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| | RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |

JP 2003-308739 A 20030901

AB An antireflection layer is formed on one surface of a transparent base film, and a specified wavelength light shielding layer which contains a color tone correcting coloring agent for absorbing a specified wavelength light ascribable to the emission spectrum of a gas encapsulated in the PDP and/or a near-IR absorbent is formed on the other surface of the transparent base film. The specified wavelength light shielding layer is provided with an adhesive layer if necessary.

IT 536741-75-0

RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)

(CIR 1085; antireflection film for plasma display)

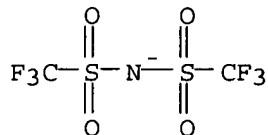
RN 536741-75-0 CAPLUS

CN Benzenaminium, N,N'-2,5-cyclohexadiene-1,4-diylidenebis[4-(dibutylamino)-N-[4-(dibutylamino)phenyl]-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:2) (9CI) (CA INDEX NAME)

CM 1

CRN 98837-98-0

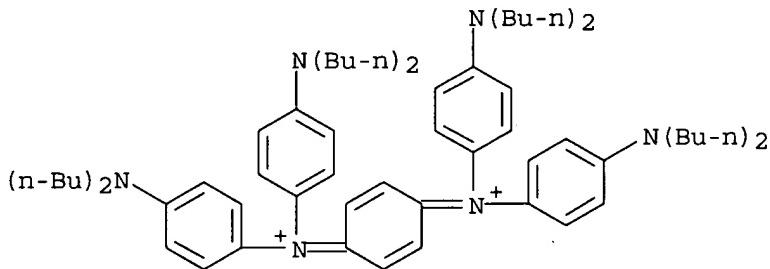
CMF C2 F6 N O4 S2



CM 2

CRN 47911-98-8

CMF C62 H92 N6



RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 18 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2005:209529 CAPLUS

DN 142:281963

TI Manufacture of ionic liquids having thiocyanate anion

IN Uerdingen, Marc; Hilgers, Claus

PA Solvent Innovation GmbH, Germany

SO Eur. Pat. Appl., 22 pp.

CODEN: EPXXDW

DT Patent

LA German

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---|------|----------|-----------------|----------|
| PI | EP 1512460 | A1 | 20050309 | EP 2003-102712 | 20030905 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK | | | | |
| | WO 2005023422 | A2 | 20050317 | WO 2004-EP52057 | 20040906 |
| | WO 2005023422 | A3 | 20050811 | | |
| | W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, | | | | |

GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
 LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
 NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
 TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
 RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
 AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
 EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,
 SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
 SN, TD, TG

EP 2003-102712 A 20030905

OS MARPAT 142:281963

AB Title liqs. (X^+) (SCN^-) (I , X^+ = hydrophilic or hydrophobic cation),
 comprise (a) the production of a salt (X^+) (A^-) (A^- = hydrophobic anion), (b)
 the replacement of A^- from step (a) by a thiocyanate salt (Y^+) (SCN^-) in a
 2-phase solvent mixture system comprising H_2O and organic solvents; and (c) the
 isolation of I from one of the two phased. I are light stable free (<5
 ppm) of Ag^+ and I^- ions and are useful as solvents,
 phase-transfer catalysts, extractants, electrolytes, components in
 dye-based solar cells or sensors, and as surfactants or plasticizers.
 Thus, 1-ethyl-3-methylimidazolium thiocyanate was prepared by reacting 5.05
 g 1-ethyl-3-methylimidazolium hexafluorophosphate and 5.93 g
 tetrabutylammonium thiocyanate in 50 mL water and 50 mL di-Et ether,
 having silver and iodine ion contents ≤ 3 ppm, viscosity
 24.3 cPa, light stable, i.e. no discoloration after 3 wk under light, and
 elec. conductivity 12 mS/cm.

IT 174899-81-1 712354-97-7

RL: RCT (Reactant); RACT (Reactant or reagent)
 (manufacture of ionic liqs. having thiocyanate anion)

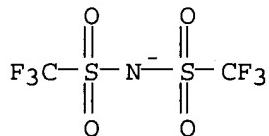
RN 174899-81-1 CAPLUS

CN 1H-Imidazolium, 1,3-dimethyl-, salt with 1,1,1-trifluoro-N-
 [(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 98837-98-0

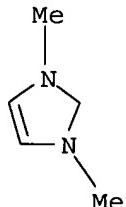
CMF C2 F6 N O4 S2



CM 2

CRN 45470-32-4

CMF C5 H9 N2

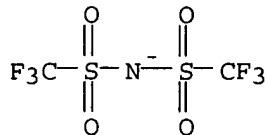


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 712354-97-7 CAPLUS
CN Pyridinium, 1-ethyl-, salt with 1,1,1-trifluoro-N-[trifluoromethyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

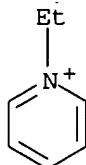
CM 1

CRN 98837-98-0
CMF C2 F6 N O4 S2



CM 2

CRN 15302-96-2
CMF C7 H10 N



RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 19 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2005:98342 CAPLUS
DN 142:180476
TI Secondary nonaqueous electrolyte battery
IN Kuboki, Takashi; Okuyama, Akio; Osaki, Takahisa; Takami, Norio
PA Toshiba Corp., Japan
SO Jpn. Kokai Tokkyo Koho, 24 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------|------|----------|----------------------------------|----------------------|
| ----- | ---- | ----- | ----- | ----- |
| PI JP 2005032551 | A2 | 20050203 | JP 2003-196033
JP 2003-196033 | 20030711
20030711 |

OS MARPAT 142:180476
AB The battery has a molten salt containing dicyanamide anion and cation ions selected from I [R1-4 = C₁₋₈ (O containing) alkyl, Ph, or benzyl groups], II [R5 and R7 = C₁₋₈ (O containing) alkyl groups; R6 and R8 = C₁₋₈ (O containing) alkyl groups or H], III [R9 = C₁₋₈ (O containing) alkyl groups], IV [R10 and R11 = C₁₋₈ (O containing) alkyl, Ph, or benzyl groups], or V [R12 and R13 = C₁₋₈ (O containing) alkyl, Ph, or benzyl groups]. The molten salt may also contain other anions selected from BF₄⁻, PF₆⁻, B(C₂O₄)₂⁻, perfluorocarbon sulfonate, perfluorocarbonsulfonimide, and perfluorosulfo cyanamide ions.
IT 223437-11-4, N-Butyl-N-methylpyrrolidinium bis(trifluoromethanesulfonyl)imide
RL: DEV (Device component use); USES (Uses)

(compns. of molten salt nonaq. electrolytes for secondary lithium batteries)

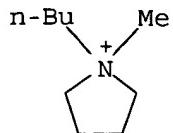
RN 223437-11-4 CAPLUS

CN Pyrrolidinium, 1-butyl-1-methyl-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 223437-10-3

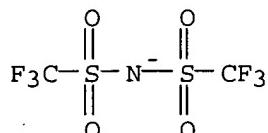
CMF C9 H20 N



CM 2

CRN 98837-98-0

CMF C2 F6 N O4 S2



L14 ANSWER 20 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2005:75853 CAPLUS

DN 142:138394

TI Nonaqueous-electrolyte lithium/oxygen air batteries

IN Kuboki, Takashi; Okuyama, Akio; Osaki, Takahisa; Takami, Norio

PA Toshiba Corp., Japan

SO Jpn. Kokai Tokkyo Koho, 27 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---------------|------|----------|----------------------------------|----------------------|
| PI | JP 2005026023 | A2 | 20050127 | JP 2003-188878
JP 2003-188878 | 20030630
20030630 |

OS MARPAT 142:138394

AB The batteries comprise oxygen cathodes, Li-absorbing and -desorbing anodes, and nonaq. electrolytes containing molten salts, wherein the molten salts comprise [N(CN)2]- as anodes. Preferably, the molten salts are quaternary ammonium salts. The batteries show excellent large-current-discharge characteristics and provide high discharge even after high-temperature storage.

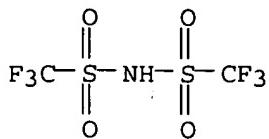
IT 90076-65-6 223437-11-4, N-Butyl-N-methylpyrrolidinium bistrifluoromethanesulfonamide

RL: DEV (Device component use); USES (Uses)
(electrolytes; nonaq.-electrolyte lithium/oxygen air batteries containing dicyanamide salts in electrolytes)

RN 90076-65-6 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-,

lithium salt (9CI) (CA INDEX NAME)



● Li

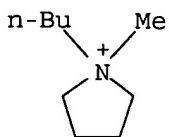
RN 223437-11-4 CAPLUS

CN Pyrrolidinium, 1-butyl-1-methyl-, salt with 1,1,1-trifluoro-N-[trifluoromethyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 223437-10-3

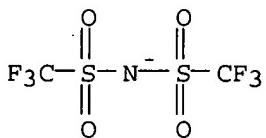
CMF C9 H20 N



CM 2

CRN 98837-98-0

CMF C2 F6 N O4 S2



L14 ANSWER 21 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2005:25333 CAPLUS

DN 142:300855

TI Efficiency improvement in solid-state-dye-sensitized photovoltaics with an amphiphilic Ruthenium-dye

AU Schmidt-Mende, Lukas; Zakeeruddin, Shaik M.; Gratzel, Michael

CS Institut des Sciences et Ingenierie Chimiques (ISIC), Laboratoire de Photonique et Interfaces (LPI), Ecole Polytechnique Federale de Lausanne (EPFL), Lausanne, CH-1015, Switz.

SO Applied Physics Letters (2005), 86(1), 013504/1-013504/3
CODEN: APPLAB; ISSN: 0003-6951

PB American Institute of Physics

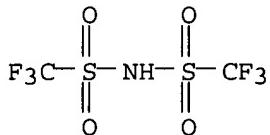
DT Journal

LA English

AB The authors report a solid-state-dye-sensitized solar cell with an efficiency of 4% over the standard air mass 1.5 spectrum (100 mW/cm²). This was made possible by using an amphiphilic dye with hydrophobic spacers.

The authors attribute the performance to the self-assembly of the dye to a dense layer on the TiO₂ surface with its carboxylate groups as anchors and with its hydrophobic isolating chains as blocking layer between hole conductor and TiO₂. In addition the authors studied the dependence of the thickness of the nanoporous TiO₂ layer and the device performance. These results show the high potential for solid-state-dye-sensitized solar cells to compete with amorphous silicon cells as low-cost alternative.

IT 90076-65-6, Lithium bis(trifluoromethanesulfonyl)imide
 RL: DEV (Device component use); USES (Uses)
 (efficiency improvement in solid-state-dye-sensitized photovoltaics
 with amphiphilic Ruthenium-dye)
 RN 90076-65-6 CAPLUS
 CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME)



● Li

RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 22 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2004:1081208 CAPLUS
 DN 142:41556
 TI Aliovalent anion protective layers for active metal anodes
 IN De Jonghe, Lutgard; Nimon, Yevgeniy S.; Visco, Steven J.
 PA Polyplus Battery Company, USA
 SO PCT Int. Appl., 37 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|---|----------|-----------------|------------|
| PI WO 2004109823 | A1 | 20041216 | WO 2004-US17646 | 20040604 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,
SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
SN, TD, TG | | | | |
| US 2003-476143P | P | 20030604 | | |
| US 2003-482997P | P | 20030627 | | |
| US 2004-861336 | A | 20040603 | | |
| US 2004253510 | A1 | 20041216 | US 2004-861336 | 20040603 |
| | | | US 2003-476143P | P 20030604 |
| | | | US 2003-482997P | P 20030627 |
| AB | Active metal anodes can be protected from deleterious reaction and voltage delay in an active metal anode-solid cathode battery cell, and damage to | | | |

the anode can be significantly reduced or completely alleviated by coating the active metal anode (e.g., Li) surface with a thin layer of a chemical protective layer incorporating aliovalent (multivalent) anions on the lithium metal surface. Such an aliovalent surface layer is conductive to Li-ions but can protect lithium metal from reacting with oxygen, nitrogen or moisture in ambient atmospheric thereby allowing the lithium material to be handled outside of a controlled atmospheric, such as a dry room. Particularly, preferred examples of such protective layers include mixts. or solid solns. of lithium phosphate, lithium metaphosphate, and/or lithium sulfate. These protective layers can be formed on the Li surface by treatment with diluted solns. of the following acids: H₃PO₄, HPO₃ and H₂SO₄ or their acidic salts in a dry organic solvent compatible with Li by various techniques. Such chemical protection of the Li or other active metal electrode significantly enhances active metal electrode protection and reduces the voltage delay due to protected anode's improved stability toward the electrolyte.

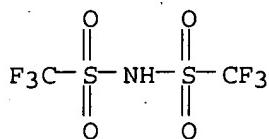
IT 90076-65-6, Litfsi

RL: DEV (Device component use); USES (Uses)

(aliovalent anion protective layers for active metal anodes)

RN 90076-65-6 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME)



● Li

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 23 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2004:964547 CAPLUS

DN 141:417632

TI Reversible electro-optic device employing aprotic molten salts and method
IN Warner, Benjamin P.; McCleskey, T. Mark; Burrell, Anthony K.; Hall, Simon
B.

PA The Regents of The University of California, USA

SO U.S. Pat. Appl. Publ., 15 pp.

CODEN: USXXCO

DT Patent

LA English

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---------------|---|----------|-----------------|----------|
| PI | US 2004223207 | A1 | 20041111 | US 2003-430780 | 20030505 |
| | US 6862125 | B2 | 20050301 | | |
| | WO 2004099863 | A2 | 20041118 | WO 2004-US7643 | 20040311 |
| | WO 2004099863 | A3 | 20050414 | | |
| | W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | |
| | RW: | BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, | | | |

BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,
 ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
 SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN,
 TD, TG

| | | | |
|---------------|----|----------------|-------------|
| US 2004227983 | A1 | US 2004-831572 | A 20030505 |
| | | US 2003-430780 | 20040422 |
| | | US 2003-430780 | A3 20030505 |

OS MARPAT 141:417632

AB Reversible electrooptical devices (e.g., reversible electrodeposited mirrors) that comprise a chamber and, as the medium of variable transmittance to light, a solution of an aprotic molten salt, ≥ 1 soluble metal-containing species comprising metal capable of being electrodeposited, and ≥ 1 anodic compound capable of being oxidized are described in which the solution comprises anions which do not bind strongly enough to the metal-containing species to form metal complexes with the anions. Preferably, the aprotic molten salt is liquid at room temperature and includes lithium and/or
 quaternary ammonium cations, and anions selected from trifluoromethylsulfonate, bis(trifluoromethylsulfonyl)imide, bis(perfluoroethylsulfonyl)imide, and tris(trifluoromethylsulfonyl)methide. The devices may also employ UV stabilizers and stiffening agents (e.g., polymers) and thixotropic agents. The molten salt solution may include an aprotic organic cosolvent with a b.p. $>150^\circ$.

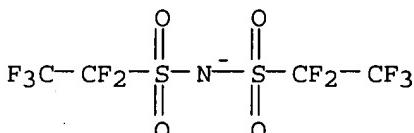
IT 129318-46-3D, Bis(perfluoroethylsulfonyl)imide, compds.

391611-04-4

RL: CPS (Chemical process); DEV (Device component use); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses)
 (reversible electrodeposition-based electrooptical devices employing aprotic molten salts)

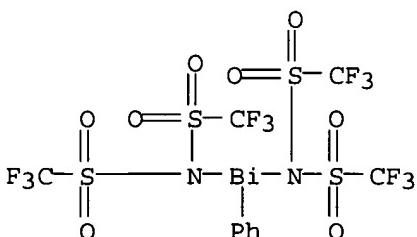
RN 129318-46-3 CAPLUS

CN Ethanesulfonamide, 1,1,2,2,2-pentafluoro-N-[(pentafluoroethyl)sulfonyl]-, ion(1-) (9CI) (CA INDEX NAME)



RN 391611-04-4 CAPLUS

CN Methanesulfonamide, N,N'-(phenylbismuthylene)bis[1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]- (9CI) (CA INDEX NAME)



IT 174899-83-3P 223437-11-4P

RL: DEV (Device component use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
 (reversible electrodeposition-based electrooptical devices employing aprotic molten salts)

RN 174899-83-3 CAPLUS

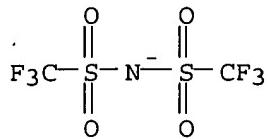
CN 1H-Imidazolium, 1-butyl-3-methyl-, salt with 1,1,1-trifluoro-N-

[*(trifluoromethyl)sulfonyl*]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 98837-98-0

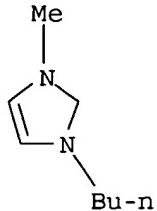
CMF C2 F6 N O4 S2



CM 2

CRN 80432-08-2

CMF C8 H15 N2



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

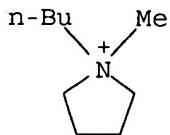
RN 223437-11-4 CAPLUS

CN Pyrrolidinium, 1-butyl-1-methyl-, salt with 1,1,1-trifluoro-N-[*(trifluoromethyl)sulfonyl*]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 223437-10-3

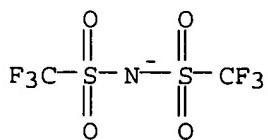
CMF C9 H20 N



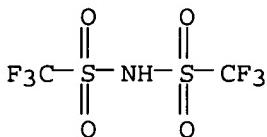
CM 2

CRN 98837-98-0

CMF C2 F6 N O4 S2



IT 90076-65-6, Lithium bis(trifluoromethylsulfonyl)imide
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reversible electrodeposition-based electrooptical devices employing
 aprotic molten salts)
 RN 90076-65-6 CAPLUS
 CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-,
 lithium salt (9CI) (CA INDEX NAME)



● Li

RE.CNT 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 24 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2004:905180 CAPLUS
 DN 141:381606
 TI Facilitated transport membranes comprising a porous support and a solid polymer electrolyte consisting of a transition metal salt and a polymer having phthalic structure
 IN Kang, Yong Soo; Kim, Hoon Sik; Kim, Jong Hak; Char, Kookheon; Kang, Sang Wook; Won, Jongok
 PA S. Korea
 SO U.S. Pat. Appl. Publ., 7 pp.
 CODEN: USXXCO
 DT Patent
 LA English

FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------|-------|----------|---------------------------------|------------------------|
| ----- | ----- | ----- | ----- | ----- |
| PI US 2004211319 | A1 | 20041028 | US 2004-822258
KR 2003-22841 | 20040409
A 20030411 |

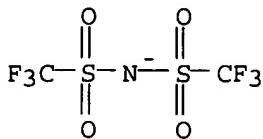
AB The present invention relates to a facilitated transport membrane for separation of alkene hydrocarbons from hydrocarbon mixts., comprising a porous support and a solid polymer electrolyte consisting of a transition metal salt and a polymer having phthalic structure, in which the electrolyte is in solid state at its operating temperature. The facilitated transport membrane is prepared by forming a solid polymer electrolyte consisting of a transition metal salt and a polymer on a porous support. The transition metal salt can selectively and reversibly form a complex with alkene hydrocarbons and the polymer can dissociate the transition metal salt. In particular, the polymer matrix allows the transition metal salt to be well dissociated because it has a phthalic structure capable of being coordinated to a transition metal ion.

IT 98837-98-0D, transition metal salts, complexes with phthalic acid derivative polymers

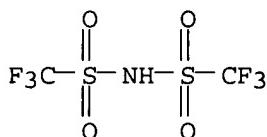
RL: TEM (Technical or engineered material use); USES (Uses)
 (facilitated transport membranes comprising porous support and solid polymer electrolyte consisting of transition metal salt and polymer having phthalic structure)

RN 98837-98-0 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, ion(1-) (9CI) (CA INDEX NAME)



L14 ANSWER 25 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2004:902491 CAPLUS
 DN 142:56398
 TI The strongest isolable acid
 AU Juhasz, Mark; Hoffmann, Stephan; Stoyanov, Evgenii; Kim, Kee-Chan; Reed, Christopher A.
 CS Department of Chemistry, University of California, Riverside, CA, 92521-0403, USA
 SO Angewandte Chemie, International Edition (2004), 43(40), 5352-5355
 CODEN: ACIEF5; ISSN: 1433-7851
 PB Wiley-VCH Verlag GmbH & Co. KGaA
 DT Journal
 LA English
 AB Several measures indicate that carborane acids H(CHB11R5X6) (R = H, Cl and X = Cl, Br, I) are the strongest pure Bronsted acids, e.g., acid strength such as an acid's ability to protonate mesityl oxide was measured relative to its ^{13}C NMR chemical shift value ($\Delta\delta$ ^{13}C , ppm). Another method to evaluate a carborane acid strength was based on its IR spectroscopy, e.g., $\nu_{\text{N-H}}$ frequencies of the acid's tri-n-octylammonium salts in CCl_4 has revealed H(CHB11Cl11) as the strongest isolable acid presently known.
 IT 82113-65-3
 RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); PRP (Properties); PROC (Process)
 (Bronsted acid strengths of carborane acids measured by carbon-13 NMR chemical shifts and N-H IR frequencies of the ammonium salts of their conjugate base anions)
 RN 82113-65-3 CAPLUS
 CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]- (9CI)
 (CA INDEX NAME)



RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 26 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2004:856728 CAPLUS
 DN 141:352544
 TI Facilitated transport membranes comprising a porous supported membrane and a transition metal salt-polymer mixture membrane containing transition metal salt and polymer capable of physically dispersing the salt
 IN Kim, Jong Hak; Kang, Yong Soo; Jung, Bumsuk; Won, Jongok; Min, Byoung Ryul; Kim, Hoon Sik
 PA S. Korea
 SO U.S. Pat. Appl. Publ., 8 pp.
 CODEN: USXXCO
 DT Patent

LA English

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|--|------|----------|---------------------------------|------------------------|
| PI | US 2004200355 | A1 | 20041014 | US 2003-750667
KR 2003-22842 | 20031231
A 20030411 |
| | JP 2004314047 | A2 | 20041111 | JP 2003-431205
KR 2003-22842 | 20031225
A 20030411 |
| | EP 1468719 | A1 | 20041020 | EP 2003-29945 | 20031229 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK | | | KR 2003-22842 | A 20030411 |

AB The present invention relates to a facilitated transport membrane for separation of alkene hydrocarbons from hydrocarbon mixts., comprising a porous supported membrane and a transition metal salt-polymer membrane consisting of a transition metal and a polymer, in which the transition metal salt does not chemically react with the polymer but phys. dispersed within the polymer which has no functional group capable of forming a complex with the transition metal salt. The facilitated transport membrane is prepared by forming a solid transition metal salt-polymer membrane consisting of a transition metal salt and a polymer capable of dispersing the transition metal salt on the mol. scale; and coating the solid membrane on a porous supported membrane with good permeance and superior mech. strength. In particular, the polymer matrix allows the transition metal salt to be well dissociated because it has no functional group capable of forming a complex with a transition metal. The facilitated transport membrane is characterized in that its permeance and selectivity to alkene hydrocarbons is high and in that the transition metal ion in the transition metal salt-polymer membrane maintains its activity as a carrier for alkene hydrocarbons even under long-term dry operating conditions.

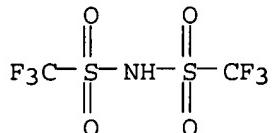
IT 82113-65-3D, Bis(trifluoromethanesulfonyl)amine, transition metal salts

RL: RCT (Reactant); RACT (Reactant or reagent)

(facilitated transport membranes comprising a porous supported membrane and having a transition metal salt dispersed therein)

RN 82113-65-3 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]- (9CI)
(CA INDEX NAME)



L14 ANSWER 27 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2004:823976 CAPLUS

DN 141:340109

TI Electrochromic mirrors and other electrooptic devices and their production

IN Agrawal, Anoop; Tonazzi, Juan Carlos Lopez; Lecompte, Robert S.; Cronin, John P.

PA Electrochromix, Inc, USA

SO PCT Int. Appl., 95 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---------------|------|----------|-----------------|----------|
| PI | WO 2004085567 | A2 | 20041007 | WO 2004-US6526 | 20040304 |

WO 2004085567

A3 20050526

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
 CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
 GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
 LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
 NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
 TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
 RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
 BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,
 ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
 SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN,
 TD, TG

US 2003-452332P P 20030305

US 2003-502781P P 20030912

US 2003-531463P P 20031219

AB A variety of modifications related to electrochromic devices, especially automotive electrochromic mirrors, and methods for their production are described. The modifications include methods for assembling an electrochromic device which comprises a rear element and a transparent front element being sealably bonded together in a spaced apart relationship to define a chamber comprising the steps of injecting an electrolyte comprising a polymer formulation into the chamber at elevated temperature, the polymer formulation being of a type that upon cooling will solidify the electrolyte by multiphase formation. Electrochromic devices are also described which employ different sealant systems which incorporate inorg. components, especially crystalline nanoparticles, crystalline spacer

beads, silsquioxanes, etc., and/or reflective electrodes and transparent conductive layers formed from specified materials. Automotive electrochromic mirror systems capable of selective response which is graduated based on external light levels (day/night) are also described, as are sensors for controlling them.

IT 223437-11-4 270256-47-8

RL: DEV (Device component use); USES (Uses)
 (electrochromic devices and their production)

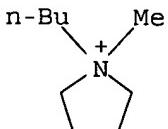
RN 223437-11-4 CAPLUS

CN Pyrrolidinium, 1-butyl-1-methyl-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 223437-10-3

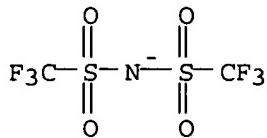
CMF C9 H20 N



CM 2

CRN 98837-98-0

CMF C2 F6 N O4 S2



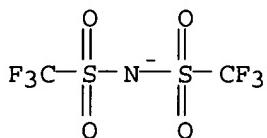
RN 270256-47-8 CAPLUS

CN 4,4'-Bipyridinium, 1,1'-diethyl-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:2) (9CI) (CA INDEX NAME)

CM 1

CRN 98837-98-0

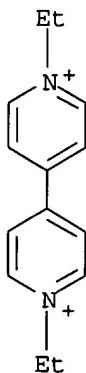
CMF C2 F6 N O4 S2



CM 2

CRN 46713-38-6

CMF C14 H18 N2



L14 ANSWER 28 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2004:823008 CAPLUS

DN 141:334863

TI Crosslinked polyoxyalkylene-polysiloxanes for use as nonaqueous salt-type electrolytes for lithium secondary batteries

IN Barrandon, Georges; George, Catherine; Vergelati, Caroll; Giraud, Yves

PA Rhodia Chimie, Fr.

SO Fr. Demande, 25 pp.

CODEN: FRXXBL

DT Patent

LA French

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|------------|------|----------|-----------------|----------|
| PI | FR 2853321 | A1 | 20041008 | FR 2003-4153 | 20030403 |
| | FR 2853321 | B1 | 20050506 | | |

| | | | |
|--|-------------|---------------|----------|
| WO 2004090037 | A1 20041021 | WO 2004-FR708 | 20040323 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | |
| RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN,
TD, TG | | | |

FR 2003-4153 A 20030403

OS MARPAT 141:334863

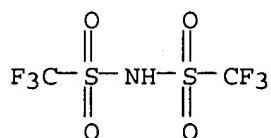
AB Crosslinked polymeric electrolytes for lithium secondary batteries consist of: (1) a first poly(hydrogen organic siloxane) with ≥ 2 Si-H bonds per mol., (2) a second polysiloxane containing ≥ 2 Si-OH bonds per mol., (3) a dehydrogenation-condensation catalyst, and (4) ≥ 1 salt electrolyte. The polyoxyalkylene ether functions are derived from polyoxyethylene, polyoxypropylene, or their mono-Me ethers. The dehydrogenation-condensation catalysts are typically metal complexes based on Pt, B, Rh, Pd, Sn, or Ir, preferably Karstedt (hydrosilylation) catalysts of formula IrCl(C₂O)(PPh₃)₂. Suitable salt electrolytes include LiClO₄, LiBF₄, LiAsF₆, CF₃SO₃Li, LiN(CF₃SO₂)₂, and LiN(C₂F₅SO₂)₂ in a non-aqueous electrolyte solvent, as well as other cations (e.g., transition metal cations, selected from Mn, Fe, Co, Ni, Cu, Zn, Ca, and Ag). Addnl. ions include ammonium, amidinium, guanidinium cations, halides, ClO₄⁻, SCN⁻, BF₄⁻, NO₃⁻, AsF₆⁻, PF₆⁻, RSO₃⁻ (R = stearyl, CF₃, octyl, dodecylphenyl, and C₁₋₆-perfluoroalkyl and -perfluoroaryl), (R₅SO₂)₂N⁻, and (R₄SO₂)(R₅SO₂)(R₆SO₂)C⁻ (R₄₋₆ = C₁₋₆-perfluoroalkyl and -perfluoroaryl).

IT 90076-65-6P 132843-44-8P

RL: DEV (Device component use); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (battery electrolytes containing; crosslinked polyoxyalkylene-polysiloxanes for use as nonaq. salt-type electrolytes for lithium secondary batteries)

RN 90076-65-6 CAPPLUS

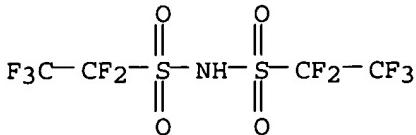
CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME)



● Li

RN 132843-44-8 CAPPLUS

CN Ethanesulfonamide, 1,1,2,2,2-pentafluoro-N-[(pentafluoroethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME)



● Li

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 29 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2004:823007 CAPLUS

DN 141:334862

TI Photochemical crosslinked epoxy-polyoxyalkylene-polysiloxanes for use as nonaqueous salt-type electrolytes for lithium secondary batteries

IN Gambut, Lucile; Vergelati, Caroll; Sanchez, Jean Yves; Alloin, Fannie

PA Rhodia Chimie, Fr.

SO Fr. Demande, 30 pp.

CODEN: FRXXBL

DT Patent

LA French

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---------------|------|----------|-----------------|----------|
| PI | FR 2853320 | A1 | 20041008 | FR 2003-4150 | 20030403 |
| | FR 2853320 | B1 | 20050506 | | |
| | WO 2004091033 | A2 | 20041021 | WO 2004-FR707 | 20040323 |
| | WO 2004091033 | A3 | 20050714 | | |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN,
TD, TG

FR 2003-4150 A 20030403

OS MARPAT 141:334862

AB Crosslinked polymeric electrolytes for lithium secondary batteries are prepared from a polyorganosiloxane grafted with polyoxyalkylene and epoxy functions, followed by radiochem. or photochem. (e.g., UV-induced) crosslinking in the presence of a photosensitizer. The crosslinked epoxy-polyoxyalkylene-polysiloxanes have the general formula R₁xR₂yR₃zSiO(4-x-z)/2, in which R₁₋₃ are C₁-12-alkyl, C₅-10-cycloalkyl, C₆-18-aryl, aralkyl, or -OR₄ (R₄ = H or C₁-15-alkyl; and x + y + z = 1-3). The product polysiloxanes (typically prepared from Si-H bond-containing polysiloxanes by hydrosilylation grafting with allyl-terminated polyoxyalkylenes and epoxides) are then combined with organic salts to form the battery electrolytes. Suitable salt electrolytes include LiClO₄, LiBF₄, LiAsF₆, CF₃SO₃Li, LiN(CF₃SO₂)₂, and LiN(C₂F₅SO₂)₂, other cations (e.g., transition metal cations); ammonium, amidinium, and guanidinium salts; organic sulfonates, imidodisulfonates, methanetrisulfonates, organoboron complex salts, ferricenium salts, and other onium salts (especially iodonium and sulfonium compds.).

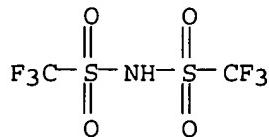
IT 90076-65-6P 132843-44-8P

RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or

engineered material use); PREP (Preparation); USES (Uses)
(battery electrolytes containing; photochem. crosslinked
epoxy-polyoxyalkylene-polysiloxanes for use as nonaq. salt-type
electrolytes for lithium secondary batteries)

RN 90076-65-6 CAPLUS

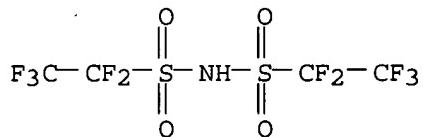
CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-,
lithium salt (9CI) (CA INDEX NAME)



● Li

RN 132843-44-8 CAPLUS

CN Ethanesulfonamide, 1,1,2,2,2-pentafluoro-N-[(pentafluoroethyl)sulfonyl]-,
lithium salt (9CI) (CA INDEX NAME)



● Li

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 30 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2004:823006 CAPLUS

DN 141:334861

TI Crosslinked polyoxyalkylene-polysiloxanes for use as nonaqueous salt-type
electrolytes for lithium secondary batteries

IN Gambut, Lucile; George, Catherine; Vergelati, Caroll; Pujol, Jean Marc

PA Rhodia Chimie, Fr.

SO Fr. Demande, 24 pp.

CODEN: FRXXBL

DT Patent

LA French

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---------------|---|----------|-----------------|----------|
| PI | FR 2853319 | A1 | 20041008 | FR 2003-4157 | 20030403 |
| | FR 2853319 | B1 | 20050506 | | |
| | WO 2004090038 | A1 | 20041021 | WO 2004-FR709 | 20040323 |
| | W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | |
| | RW: | BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, | | | |

BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GO, GW, ML, MR, NE, SN,
TD, TG

FR 2003-4157

A 20030403

OS MARPAT 141:334861

AB Polymeric electrolytes for lithium secondary batteries consist of: (1) a polyorganosiloxane containing ≥ 2 C2-6-alkenylsilane or -alkenylsiloxane, and includes a polyoxyalkylene ether function, (2) a second polyorganosiloxane containing ≥ 2 (preferably 0.4-10) active Si-H bonds per mol., (3) a hydrosilylation catalyst (especially a Karstedt-type complex), and (4) ≥ 1 salt electrolyte. The polyoxyalkylene ether functions are derived from polyoxyethylene, polyoxypropylene, or their mono-Me ethers. Suitable salt electrolytes include LiClO₄, LiBF₄, LiAsF₆, CF₃SO₃Li, LiN(CF₃SO₂)₂, and LiN(C₂F₅SO₂)₂ in a non-aqueous electrolyte solvent, as well as other cations (e.g., a transition metal cations, selected from Mn, Fe, Co, Ni, Cu, Zn, Ca, and Ag).

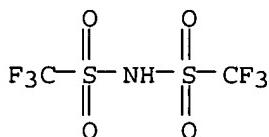
IT 90076-65-6 132843-44-8

RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)

(battery electrolytes containing; crosslinked polyoxyalkylene-polysiloxanes for use as nonaq. salt-type electrolytes for lithium secondary batteries)

RN 90076-65-6 CAPLUS

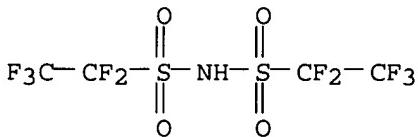
CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME)



● Li

RN 132843-44-8 CAPLUS

CN Ethanesulfonamide, 1,1,2,2,2-pentafluoro-N-[(pentafluoroethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME)



● Li

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 31 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2004:617748 CAPLUS

DN 141:313991

TI Bronsted Acid-Promoted Cyclizations of Siloxyalkynes with Arenes and Alkenes

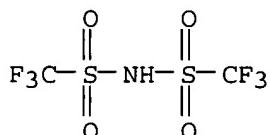
AU Zhang, Liming; Kozmin, Sergey A.
 CS Department of Chemistry, University of Chicago, Chicago, IL, 60637, USA
 SO Journal of the American Chemical Society (2004), 126(33), 10204-10205
 CODEN: JACSAT; ISSN: 0002-7863
 PB American Chemical Society
 DT Journal
 LA English
 AB The first Bronsted acid-mediated cyclizations of siloxyalkynes with simple arenes and alkenes to afford substituted tetralone and cyclohexenone derivs. The most notable aspect of the carbocyclizations involving siloxyalkynes is the ability to employ a range of substrates that are not restricted to those containing electron-rich arenes and alkenes. The key mechanistic feature of the reaction is the generation of a highly reactive ketenium ion upon protonation of siloxyalkyne. It is hypothesized that the low nucleophilicity of the counter-anion is crucial for enabling the formation and effective interception of this highly reactive intermediate. For example, the Bronsted acid-mediated carbocyclization of tris(1-methylethyl)[(4-phenyl-1-butynyl)oxy]silane (I) gave [(3,4-dihydro-1-naphthalenyl)oxy]tris(1-methylethyl)silane (II). The silver triflate-mediated carbocyclization of I gave 3,4-dihydro-1(2H)-naphthalenone, instead.

IT 82113-65-3

RL: RGT (Reagent); RACT (Reactant or reagent)
 (preparation of (silyloxy)cycloalkenes or cycloalkenones by carbocyclization of (siloxy)alkynes or [[(alkyl)alkenynyl]oxy]silanes promoted by trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (Bronsted acid))

RN 82113-65-3 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]- (9CI)
(CA INDEX NAME)



RE.CNT 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

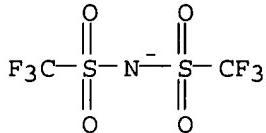
L14 ANSWER 32 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2004:569985 CAPLUS
 DN 141:130990
 TI Electroluminescent materials based on metal complexes or organometallic complexes and devices employing the electroluminescent materials
 IN Kathirgamanathan, Poopathy; Kandappu, Vijendra; Ganeshamurugan, Subramaniam; Paramaswara, Gnanamoly
 PA Elam-T Limited, UK
 SO PCT Int. Appl., 59 pp.
 CODEN: PIXXD2
 DT Patent
 LA English

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---------------|---|----------|-----------------|----------|
| PI | WO 2004058912 | A2 | 20040715 | WO 2003-GB5663 | 20031223 |
| | WO 2004058912 | A3 | 20041229 | | |
| | W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, | | | |

PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN,
 TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
 RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
 BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,
 ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK,
 TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
 GB 2002-30074 A 20021224
 GB 2002-30077 A 20021224
 EP 157886 A2 20050928 EP 2003-782701 20031223
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
 GB 2002-30074 A 20021224
 GB 2002-30077 A 20021224
 WO 2003-GB5663 W 20031223

AB Electroluminescent devices are described which comprise a first electrode, a layer of a first electroluminescent metal complex or organo metallic complex, a layer of a second metal complex or organo metallic complex and a second electrode and in which the band gap of the second electroluminescent metal complex or organo metallic complex is larger than the band gap of the first electroluminescent metal complex or organo metallic complex.
 IT 98837-98-0D, metal complexes
 RL: DEV (Device component use); USES (Uses)
 (electroluminescent materials based on metal complexes or organometallic complexes and devices employing electroluminescent materials)
 RN 98837-98-0 CAPLUS
 CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, ion(1-) (9CI) (CA INDEX NAME)



L14 ANSWER 33 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2004:534173 CAPLUS
 DN 141:89016
 TI Preparation of benzimidazolylazabicyclooctylethylpiperidines as Ccr5 antagonists for the treatment of HIV infection
 IN Kazmierski, Wieslaw Mieczyslaw; Aquino, Christopher Joseph; Bifulco, Neil; Boros, Eric Eugene; Chauder, Brian Andrew; Chong, Pek Yoke; Duan, Maosheng; Deanda, Felix, Jr.; Koble, Cecilia Suarez; Mclean, Ed Williams; Peckham, Jennifer Poole; Perkins, Angilique C.; Thompson, James Benjamin; Vanderwall, Dana
 PA Smithkline Beecham Corporation, USA; et al.
 SO PCT Int. Appl., 859 pp.

CODEN: PIXXD2

DT Patent
 LA English

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---------------|---|----------|-----------------|----------|
| PI | WO 2004054974 | A2 | 20040701 | WO 2003-US39644 | 20031212 |
| | WO 2004054974 | A3 | 20040902 | | |
| | W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, | | | |

| | |
|------------|---|
| | NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ,
TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW |
| RW: | BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK,
TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG |
| | US 2002-433634P P 20021213 |
| CA 2509711 | AA 20040701 CA 2003-2509711 20031212 |
| | US 2002-433634P P 20021213 |
| | WO 2003-US39644 W 20031212 |
| EP 1569646 | A2 20050907 EP 2003-813419 20031212 |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK |
| | US 2002-433634P P 20021213 |
| | WO 2003-US39644 W 20031212 |

OS MARPAT 141:89016

AB Compds. I [R1 = (optionally substituted) alkyl, aryl, heteroaryl, carbocyclyl; R2 = H, (optionally substituted) alkyl, aryl, heteroaryl, cycloalkyl, heterocycloalkyl, aralkyl, heteroarylalkyl, heteroarylcarbonyl, heteroarylsulfinyl; R3 = H, halo, cyano, trifluoromethyl, (optionally substituted) amino, acylamino, alkyl; X = C1-5 alkylene, optionally substituted with oxo or thioxo groups or halogen atoms, and optionally containing 1-3 oxygen, nitrogen, sulfur, or phosphorus atoms; Y = carbonyl, thiocarbonyl, 1,2-dioxaethylene, oxyalkylcarbonyl, sulfinyl, sulfonyl, oxycyanoimino, (optionally substituted) aminocarbonyl, carbonylamino, aminothiocarbonyl, oxyiminomethyl, thioiminomethyl, amino(cyanoimino)methyl, (cyanoimino)methyl, amino(acylimino)methyl, amino(sulfonylimino)methyl, amino(sulfinylimino)methyl, amino(alkoxyimino)methyl, amino(imino)methyl, (cyanoimino)methoxy, iminomethoxy, (cyanoimino)methanethiyl, alkylcarbonyloxy; A = saturated, partially saturated, or aromatic monocyclic ring with 5-6 atoms or a bicyclic ring with 8-10 members containing 0-5 nitrogen, oxygen, and/or sulfur atoms] such as II are prepared I are prepared as Ccr5 antagonists for the treatment of viral infections, (particularly HIV infection), related syndromes such as AIDS-related complex (ARC), progressive generalized lymphadenopathy, Kaposi's sarcoma, and neurol. conditions, and other diseases such as multiple sclerosis, rheumatoid arthritis, Crohn's disease, and immune-mediated disorders. The invention compds. have pIC50 values of ≥5 in assays for Ccr5 antagonism.

Piperidineacetaldehyde III is prepared in four steps from 4-phenyl-4-piperidinecarbonitrile by protection of the piperidine with Boc anhydride, reduction of the nitrile with diisobutylaluminum hydride, Wittig olefination with methoxymethylphosphonium chloride, and hydrolysis of the enol ether with catalytic p-toluenesulfonic acid monohydrate. The hydrochloride of endo-(benzimidazolyl)azabicyclooctane IV is prepared in five steps from tert-Bu endo-3-oxo-8-azabicyclo[3.2.1]octane-8-carboxylate; reductive amination with benzylamine, reductive cleavage of the benzyl group by palladium-mediated hydrogenation, a nucleophilic aryl substitution reaction with 1-fluoro-2-nitrobenzene, reduction of the nitro group by hydrogenation over palladium on carbon, and treatment with tri-Et orthoacetate followed by treatment with hydrochloric acid in ethanol. Coupling of III and IV by reductive amination with sodium triacetoxyborohydride, cleavage of the Boc group with hydrochloric acid in dioxane, and acylation with pivaloyl chloride and triethylamine yields II.

IT 716361-54-5P 716361-55-6P

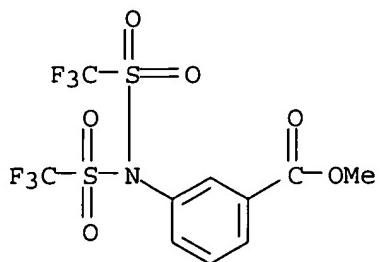
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; preparation of benzimidazolylazabicyclooctylethylpiperidine Ccr5 antagonists in the treatment of bacterial and viral infections and other diseases)

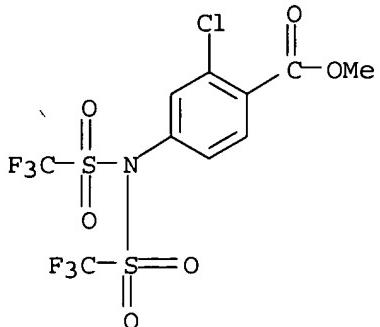
RN 716361-54-5 CAPLUS

CN Benzoic acid, 3-[bis[(trifluoromethyl)sulfonyl]amino]-, methyl ester (9CI)

(CA INDEX NAME)



RN 716361-55-6 CAPLUS
CN Benzoic acid, 4-[bis[(trifluoromethyl)sulfonyl]amino]-2-chloro-, methyl ester (9CI) (CA INDEX NAME)

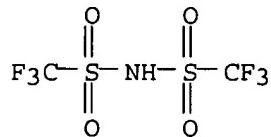


L14 ANSWER 34 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2004:527816 CAPLUS
DN 141:228012
TI The plastic-crystalline phase of succinonitrile as a universal matrix for solid-state ionic conductors
AU Alarco, Pierre-Jean; Abu-Lebdeh, Yaser; Abouimrane, Ali; Armand, Michel
CS International Laboratory on Electro-Active Materials, Department of Chemistry, University of Montreal, Montreal, H3C 3J7, Can.
SO Nature Materials (2004), 3(7), 476-481
CODEN: NMAACR; ISSN: 1476-1122
PB Nature Publishing Group
DT Journal
LA English
AB Solid ionic conductors are actively sought for their potential application in electrochem. devices, particularly lithium batteries. We have found high ionic conductivity for a large variety of salts dissolved in the highly polar medium based on the plastic-crystal form of succinonitrile (NC-CH₂-CH₂-CN). Its high diffusivity, plasticity and solvating power allowed the preparation of a large number of materials with high ionic conductivity, reaching values of 3 mS cm⁻¹ at 25° (two orders of magnitude above polymers). Their ease of preparation and processing allowed us to study the influence of the solute on ionic conduction within this medium. Comparisons revealed a dichotomy between plastic crystals and conventional polymer media. The usefulness of these new, easily processed electrolytes was asserted in electrochem. tests with lithium intercalation electrodes.
IT 90076-65-6, Litfsi
RL: DEV (Device component use); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

(plastic-crystalline phase of succinonitrile as universal matrix for solid-state ionic conductors)

RN 90076-65-6 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME)



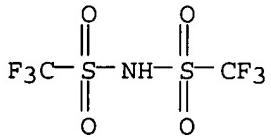
● Li

IT 90076-67-8, Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, potassium salt 91742-21-1, Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, sodium salt 161401-25-8, Tetramethylammonium bis(trifluoromethanesulfonyl)imide 165324-08-3, Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, ammonium salt 165324-09-4, Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, calcium salt 168106-22-7, Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, barium salt 460091-98-9, Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, lead(2+) salt
RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

(plastic-crystalline phase of succinonitrile as universal matrix for solid-state ionic conductors)

RN 90076-67-8 CAPLUS

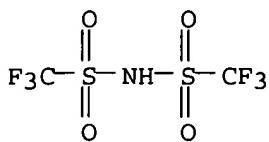
CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, potassium salt (9CI) (CA INDEX NAME)



● K

RN 91742-21-1 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, sodium salt (9CI) (CA INDEX NAME)



● Na

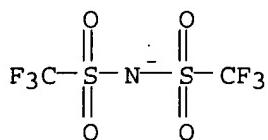
RN 161401-25-8 CAPLUS

CN Methanaminium, N,N,N-trimethyl-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 98837-98-0

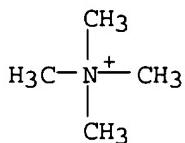
CMF C2 F6 N O4 S2



CM 2

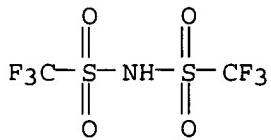
CRN 51-92-3

CMF C4 H12 N



RN 165324-08-3 CAPLUS

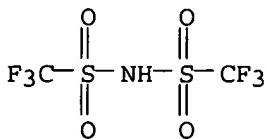
CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, ammonium salt (9CI) (CA INDEX NAME)



● NH₃

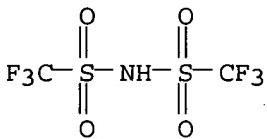
RN 165324-09-4 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, calcium salt (9CI) (CA INDEX NAME)



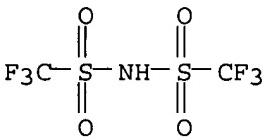
●1/2 Ca

RN 168106-22-7 CAPLUS
 CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, barium salt (9CI) (CA INDEX NAME)



●1/2 Ba

RN 460091-98-9 CAPLUS
 CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, lead(2+) salt (9CI) (CA INDEX NAME)



●1/2 Pb(II)

RE.CNT 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 35 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2004:467964 CAPLUS
 DN 141:39455
 TI Coloring matters absorbing near-infrared ray and filters for cutting off near-infrared ray
 IN Yamanobe, Susumu; Tamura, Masaaki; Yamaguchi, Yoji; Yamamoto, Hideo
 PA Japan Carlit Co., Ltd., Japan
 SO PCT Int. Appl., 23 pp.
 CODEN: PIXXD2
 DT Patent
 LA Japanese
 FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------|---|----------|-----------------|----------|
| ----- | ----- | ----- | ----- | ----- |
| PI WO 2004048480 | A1 | 20040610 | WO 2003-JP14642 | 20031118 |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, | | | |

GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK,
 LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ,
 OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
 TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
 RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
 BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,
 ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK,
 TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

JP 2002-339110 A 20021122
 EP 1564260 A1 20050817 EP 2003-772847 20031118
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
 JP 2002-339110 A 20021122
 WO 2003-JP14642 W 20031118

OS MARPAT 141:39455

AB Diimonium sulfonimides (I) absorb near IR, where R = alkyl group, halogenated alkyl, cyanoalkyl, aryl group, OH, Ph, phenylalkylene groups, same or different, R1 and R2 are fluoroalkyls, same or different, and fluoroalkylenes. Thus, a polymethacrylic resin film was coated with a solution containing Thermolac LP 45M 6, bis(trifluoromethanesulfon) imide acid N,N, N',N'-tetrakis(p-dibutylaminophenyl)-p-phenylenedimmonium 2, MEK 25, and toluene 13 parts and dried to prepare a filter.

IT 536741-75-0P 700876-21-7P 700876-23-9P

700876-25-1P 701909-20-8P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(diimonium sulfonimides absorbing near-IR ray and filters for cutting off near-IR ray)

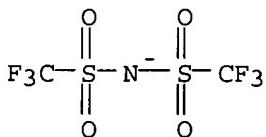
RN 536741-75-0 CAPLUS

CN Benzenaminium, N,N'-2,5-cyclohexadiene-1,4-diylidenebis[4-(dibutylamino)-N-[4-(dibutylamino)phenyl]-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:2) (9CI) (CA INDEX NAME)

CM 1

CRN 98837-98-0

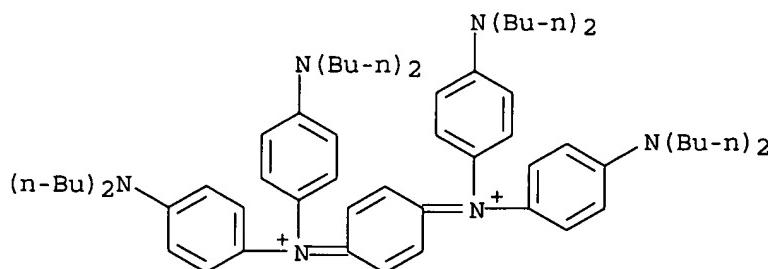
CMF C2 F6 N O4 S2



CM 2

CRN 47911-98-8

CMF C62 H92 N6



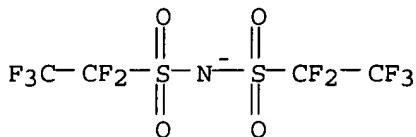
RN 700876-21-7 CAPLUS

CN Benzenaminium, N,N'-2,5-cyclohexadiene-1,4-diylidenebis[4-(dibutylamino)-N-[4-(dibutylamino)phenyl]-, salt with 1,1,2,2,2-pentafluoro-N-[(pentafluoroethyl)sulfonyl]ethanesulfonamide (1:2) (9CI) (CA INDEX NAME)

CM 1

CRN 129318-46-3

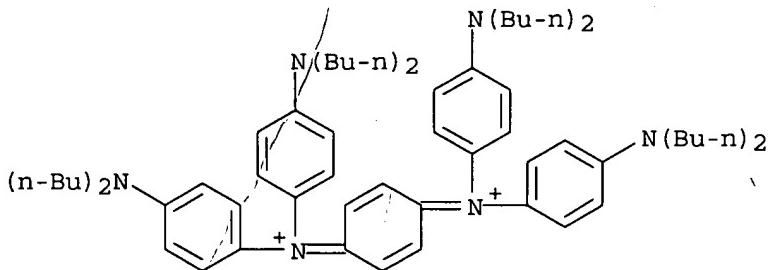
CMF C4 F10 N O4 S2



CM 2

CRN 47911-98-8

CMF C62 H92 N6



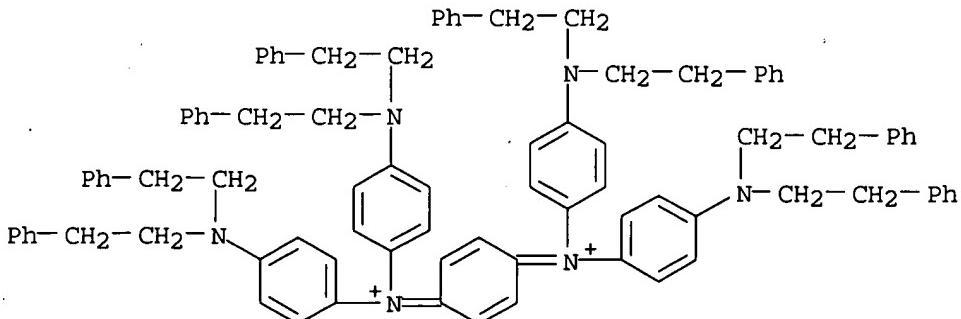
RN 700876-23-9 CAPLUS

CN Benzenaminium, N,N'-2,5-cyclohexadiene-1,4-diylidenebis[4-[bis(2-phenylethyl)amino]-N-[4-[bis(2-phenylethyl)amino]phenyl]-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:2) (9CI) (CA INDEX NAME)

CM 1

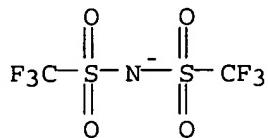
CRN 700876-22-8

CMF C94 H92 N6



CM 2

CRN 98837-98-0
CMF C2 F6 N O4 S2

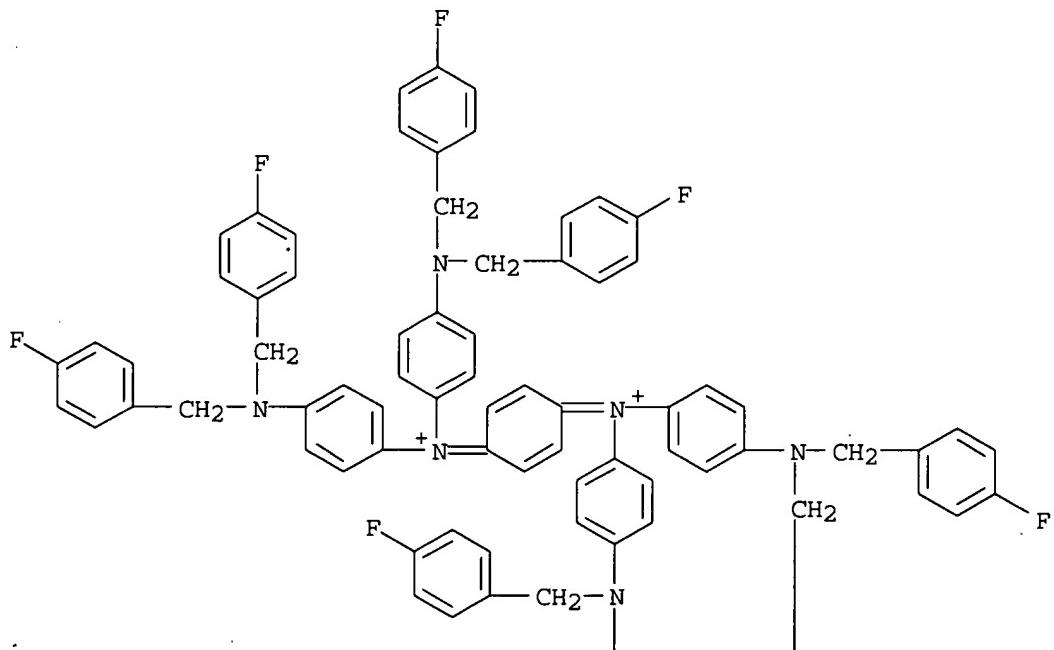


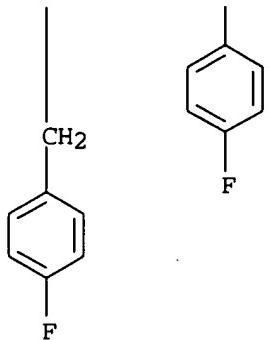
RN 700876-25-1 CAPLUS
CN Benzenaminium, N,N'-2,5-cyclohexadiene-1,4-diylidenebis[4-[bis[(4-fluorophenyl)methyl]amino]-N-[4-[bis[(4-fluorophenyl)methyl]amino]phenyl]-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamid e (1:2) (9CI) (CA INDEX NAME)

CM 1

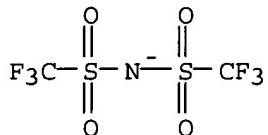
CRN 700876-24-0
CMF C86 H68 F8 N6

PAGE 1-A

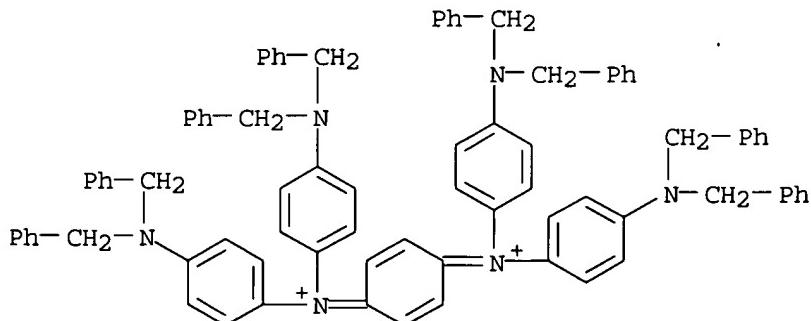




CM 2

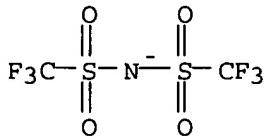
CRN 98837-98-0
CMF C2 F6 N O4 S2RN 701909-20-8 CAPLUS
CN Benzenaminium, N,N'-2,5-cyclohexadiene-1,4-diylidenebis[4-[bis(phenylmethyl)amino]-N-[4-[bis(phenylmethyl)amino]phenyl]-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:2) (9CI) (CA INDEX NAME)

CM 1

CRN 701909-19-5
CMF C86 H76 N6

CM 2

CRN 98837-98-0
CMF C2 F6 N O4 S2



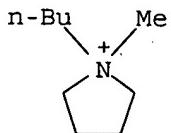
RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 36 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2004:459811 CAPLUS
 DN 142:103928
 TI New composite solid electrolytes based on a polymer and ionic liquids
 AU Lewandowski, A.; Swiderska, A.
 CS Faculty of Chemical Technology, Poznan University of Technology, Poznan,
 PL-60 965, Pol.
 SO Solid State Ionics (2004), 169(1-4), 21-24
 CODEN: SSIOD3; ISSN: 0167-2738
 PB Elsevier Science B.V.
 DT Journal
 LA English
 AB A series of ion-conducting, thin-film polymer electrolytes, based on a polymer (poly(acrylonitrile) [PAN], poly(ethylene oxide) [PEO] and poly(vinyl alc.) [PVA]), and ionic liqs. (IL), polymer-IL, as well as ternary systems PAN-IL-TMS were prepared using the casting technique (TMS is sulfolane, ionic liqs. are: 1-ethyl-3-methylimidazolium tetrafluoroborate, 1-butyl-3-methylimidazolium hexafluorophosphate and 1-butyl-1-methylpyrrolidinium bis(trifluoromethane sulfonyl)imide). The polymer electrolytes showed a rubber-like elasticity. Maximum conductivity was at the level of 15 mS/cm at room temperature. The electrochem. stability window of the electrolytes, determined at the glassy carbon electrode, was ca. 3 V.
 IT 223437-11-4P, 1-Butyl-1-methylpyrrolidinium bis(trifluoromethane sulfonyl)imide
 RL: PNU (Preparation, unclassified); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (composite solid electrolytes based on polymer and ionic liqs.)
 RN 223437-11-4 CAPLUS
 CN Pyrrolidinium, 1-butyl-1-methyl-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 223437-10-3

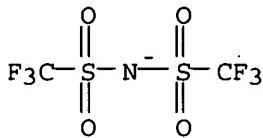
CMF C9 H20 N



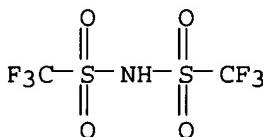
CM 2

CRN 98837-98-0

CMF C2 F6 N O4 S2



IT 90076-65-6, Lithium bis(trifluoromethane sulfonyl)imide
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (composite solid electrolytes based on polymer and ionic liqs.)
 RN 90076-65-6 CAPLUS
 CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-,
 lithium salt (9CI) (CA INDEX NAME)



● Li

RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 37 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2004:455881 CAPLUS
 DN 141:182840
 TI Electrochemical properties of novel ionic liquids for electric double layer capacitor applications
 AU Sato, Takaya; Masuda, Gen; Takagi, Kentaro
 CS Nisshinbo Industries Incorporated, Research and Development Center, Midoriku, Chiba, 267-0056, Japan
 SO Electrochimica Acta (2004), 49(21), 3603-3611
 CODEN: ELCAAV; ISSN: 0013-4686
 PB Elsevier Science B.V.
 DT Journal
 LA English
 AB An aliphatic quaternary ammonium salt which has a methoxyethyl group on the nitrogen atom formed an ionic liquid (room temperature molten salt) when combined with the tetrafluoroborate (BF_4^-) and bis(trifluoromethylsulfonyl)imide [$\text{TFSI}; (\text{CF}_3\text{SO}_2)_2\text{N}^-$] anions. The limiting oxidation and reduction potentials, specific conductivity, and some other physicochem. properties of the novel ionic liqs., N,N-diethyl-N-methyl-N-(2-methoxyethyl)ammonium tetrafluoroborate (DEME-BF₄) and DEME-TFSI have been evaluated and compared with those of 1-ethyl-3-methylimidazolium tetrafluoroborate. DEME-BF₄ is a practically useful ionic liquid for electrochem. capacitors as it has a quite wide potential window (6.0 V) and high ionic conductivity (4.8 mS cm⁻¹ at 25°). The authors prepared an elec. double layer capacitor (EDLC) composed of a pair of activated carbon electrodes and DEME-BF₄ as the electrolyte. This EDLC (working voltage .apprx.2.5 V) has both, a higher capacity above room temperature and a better charge-discharge cycle durability at 100° when compared to a conventional EDLC using an organic liquid electrolyte such as a tetraethylammonium tetrafluoroborate in propylene carbonate.
 IT 464927-84-2P
 RL: DEV (Device component use); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)

(DEME-TFSI; electrochem. properties of novel ionic liqs. for elec.
double layer capacitor applications)

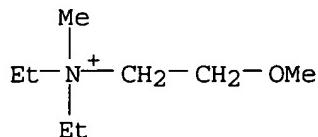
RN 464927-84-2 CAPLUS

CN Ethanaminium, N,N-diethyl-2-methoxy-N-methyl-, salt with
1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1)
(9CI) (CA INDEX NAME)

CM 1

CRN 464927-71-7

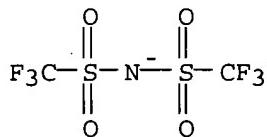
CMF C8 H20 N O



CM 2

CRN 98837-98-0

CMF C2 F6 N O4 S2



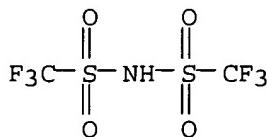
IT 90076-65-6, Lithium bis(trifluoromethanesulfonyl)imide

RL: RCT (Reactant); RACT (Reactant or reagent)

(electrochem. properties of novel ionic liqs. for elec. double layer
capacitor applications)

RN 90076-65-6 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-,
lithium salt (9CI) (CA INDEX NAME)



● Li

RE.CNT 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 38 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2004:433948 CAPLUS

DN 140:426125

TI Coating of substrates with active material, binder, and thickener for
fabrication of battery electrodes

IN Zaghib, Karim; Armand, Michel; Guerfi, Abdelbast; Perrier, Michel; Dupuis,

Elisabeth; Charest, Patrick
PA Hydro-Quebec, Can.
SO PCT Int. Appl., 37 pp.
CODEN: PIXXD2

DT Patent
LA French
FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---|------|----------|-----------------|------------|
| PI | WO 2004045007 | A2 | 20040527 | WO 2003-CA1739 | 20031113 |
| | WO 2004045007 | A3 | 20050609 | | |
| | W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| | RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | CA 2002-2411695 | A 20021113 |
| | CA 2411695 | AA | 20040513 | CA 2002-2411695 | 20021113 |
| | CA 2503893 | AA | 20040527 | CA 2003-2503893 | 20031113 |
| | | | | CA 2002-2411695 | A 20021113 |
| | | | | WO 2003-CA1739 | W 20031113 |
| EP | 1573834 | A2 | 20050914 | EP 2003-775013 | 20031113 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK | | | CA 2002-2411695 | A 20021113 |
| | | | | WO 2003-CA1739 | W 20031113 |

AB An electrode for an electrochem. cell (especially a battery) is prepared by coating at least partially the electrode with a film obtained by spreading and drying of an aqueous solution on the electrode support, in which the aqueous

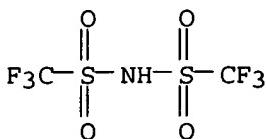
solution contains at least an active material, a water-soluble binder, and a water-soluble thickener. Suitable active materials are selected from finely divided (particle size 10-50 μ) metal oxides (e.g., LiMn₂O₄, LiCoO₂, LiFePO₄, LiNiO₂, Li₄Ti₅O₁₂, etc.), ceramics, carbon (including carbon fibers, synthetic graphite, and natural graphite), metals (e.g., Ag, Sn, and Cu), and semiconductors (especially Si). Suitable thickeners include natural and modified celluloses (e.g., CM-cellulose and hydroxymethyl cellulose); suitable binders include natural and synthetic rubber. Both anodes and cathodes can be prepared by this method. The method for electrode fabrication is especially useful for construction of secondary lithium batteries with nonaq. electrolytes and polymeric separators.

IT 90076-65-6, LiTFSI

RL: NUU (Other use, unclassified); USES (Uses)
(secondary battery nonaq. electrolytes; coating of substrates with active material, binder, and thickener for fabrication of battery electrodes)

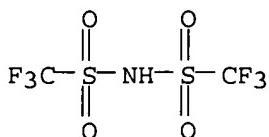
RN 90076-65-6 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME)



● Li

L14 ANSWER 39 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2004:405751 CAPLUS
 DN 141:126234
 TI Electrode Properties and Lithiation/Delithiation Reactions of Ag-Sb-Sn Nanocomposite Anodes in Li-Ion Batteries
 AU Yin, Jingtian; Wada, Masashi; Tanase, Shigeo; Sakai, Tetsuo
 CS National Institute of Advanced Industrial Science and Technology, Ikeda, Osaka, 563-8577, Japan
 SO Journal of the Electrochemical Society (2004), 151(6), A867-A872
 CODEN: JESOAN; ISSN: 0013-4651
 PB Electrochemical Society
 DT Journal
 LA English
 AB Based on the mech. alloying and good microstructural design, the Ag_{52-x}SbxSn₄₈ system was established as a candidate anode material for Li-ion batteries. Half-cell tests revealed that a Ag_{36.4}Sb_{15.6}Sn₄₈ electrode with a heterophase structure involving SnSb, Ag₃Sn, and Sn could maintain a rechargeable capacity ≤380 mA·h/g over 300 cycles when cycled in a proper organic electrolyte between 0.0 and 1.0 V vs. Li with a constant c.d. of 0.2 mA/cm². The anal. of the structural changes in the electrode during cycling indicated that the superior cycling performance of a Ag_{36.4}Sb_{15.6}Sn₄₈ electrode was due to the structurally stable intermetallic compds. of SnSb and Ag₃Sn in the host structure, stepwise lithiation/delithiation mechanisms, and AgLi₂Sn-oriented phase transformations. In addition to the phase structure of the alloy, which affected the cycling stability of the alloy electrode, the effects of different organic electrolytes on the cycling performance were also examined
 IT 90076-65-6
 RL: DEV (Device component use); USES (Uses)
 (electrolyte; electrode properties and lithiation/delithiation reactions of Ag-Sb-Sn nanocomposite anodes for lithium batteries with)
 RN 90076-65-6 CAPLUS
 CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME)



● Li

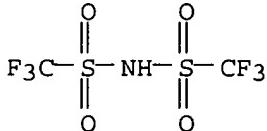
RE.CNT 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 40 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2004:405622 CAPLUS
 DN 140:393384
 TI Procedure for the fabrication of a lithium secondary battery with a cathode active material containing lithium cobalt oxide as Li intercalating heavy metal oxide
 IN Naarmann, Herbert; Kruger, Franz Josef; Theuerkauf, Stefan
 PA Gaia Akkumulatorenwerke G.m.b.H., Germany; Dilo Trading AG
 SO Ger. Offen., 6 pp.
 CODEN: GWXXBX
 DT Patent
 LA German
 FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|----------------------------|----------|----------------------|------------------|----------------------|
| PI | DE 10250747
DE 10250747 | A1
B4 | 20040519
20050217 | DE 2002-10250747 | 20021031
20021031 |

AB A cathode active material contains Co-Li oxide, a polymer binder, a poly(vinyl) compound and an aprotic solvent; an anode active mass contains a Li-intercalating carbon, a polymer binder, a poly(vinyl) compound, and an aprotic solvent; and a separator is placed between the anode and the cathode. According to the invention, this battery system is fabricated economically with a cathode, which is a mixture of Li cobalt oxide with other Li intercalating metal oxides, whereby the necessary quantity of conducting salts for the entire battery system is brought in over the separator as intermediate layer.
 IT 90076-65-6, Lithium triflimide
 RL: DEV (Device component use); USES (Uses)
 (procedure for fabrication of lithium secondary battery with cathode active material containing lithium cobalt oxide as Li intercalating heavy metal oxide)

RN 90076-65-6 CAPLUS
 CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME)

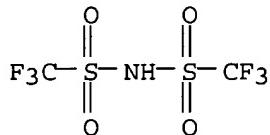


● Li

L14 ANSWER 41 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2004:203432 CAPLUS
 DN 140:238484
 TI Electrolyte for lithium-sulfur battery
 IN Jung, Yongju; Kim, Seok; Kim, Jan-Dee
 PA Samsung SDI Co., Ltd., S. Korea
 SO U.S. Pat. Appl. Publ., 11 pp.
 CODEN: USXXCO
 DT Patent
 LA English
 FAN.CNT 1

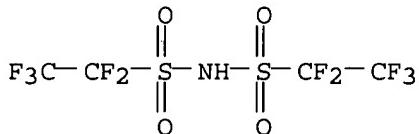
| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---------------|------|----------|-----------------|----------|
| PI | US 2004048164 | A1 | 20040311 | US 2003-434086 | 20030509 |

| | | | |
|---------------|---|----------------|------------|
| CN 1482701 | A 20040317 | KR 2002-54580 | A 20020910 |
| | | CN 2003-131476 | 20030515 |
| | | KR 2002-54580 | A 20020910 |
| JP 2004103560 | A2 20040402 | JP 2003-176118 | 20030620 |
| | | KR 2002-54580 | A 20020910 |
| AB | An electrolyte for a lithium-sulfur battery has organic solvents including dimethoxyethane, dioxolane, and diglyme. The electrolytic salt includes a lithium cation [lithium bis(fluoroalkylsulfonyl)imide, lithium triflate, LiPF ₆] or a salt including an organic cation [1-ethyl-3-methylimidazolium bis(perfluoroethylsulfonyl)imide, 1-butyl-3-methylimidazolium hexafluorophosphate, and a mixture thereof]. | | |
| IT | 90076-65-6, Lithium bis(trifluoromethylsulfonyl)imide
132843-44-8, Lithium bis(perfluoroethylsulfonyl)imide
174899-82-2, 1-Ethyl-3-methylimidazolium bis(trifluoromethylsulfonyl)imide
RL: DEV (Device component use); USES (Uses)
(electrolyte for lithium-sulfur battery) | | |
| RN | 90076-65-6 CAPPLUS | | |
| CN | Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl] -, lithium salt (9CI) (CA INDEX NAME) | | |



● Li

| | |
|-----------|---|
| RN | 132843-44-8 CAPPLUS |
| CN | Ethanesulfonamide, 1,1,2,2,2-pentafluoro-N-[(pentafluoroethyl)sulfonyl] -, lithium salt (9CI) (CA INDEX NAME) |

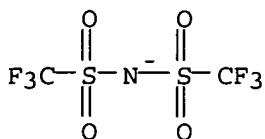


● Li

| | |
|-----------|--|
| RN | 174899-82-2 CAPPLUS |
| CN | 1H-Imidazolium, 1-ethyl-3-methyl-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME) |

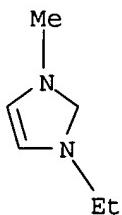
CM 1

CRN 98837-98-0
CMF C2 F6 N O4 S2



CM 2

CRN 65039-03-4
CMF C6 H11 N2



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

L14 ANSWER 42 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2004:181808 CAPLUS

DN 140:217811

TI Process for preparation of ruthenium catalysts for selective hydrogenation of dienes to produce cis alkenes

IN Kirchhoff, Jochen; Fries, Guido; Driessen-Hoelscher, Birgit; Kalz, Willi; Nobis, Markus

PA Degussa AG, Germany

SO Eur. Pat. Appl., 16 pp.
CODEN: EPXXDW

DT Patent

LA German

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---|------|----------|------------------|------------|
| PI | EP 1394170 | A1 | 20040303 | EP 2003-15753 | 20030710 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK | | | DE 2002-10240255 | A 20020831 |
| OS | DE 10240255 | A1 | 20040311 | DE 2002-10240255 | 20020831 |

CASREACT 140:217811; MARPAT 140:217811

AB The title reaction is described. Thus, reaction of RuCl₃ with pentamethylcyclopentadiene in EtOH gave 70% [Cp*RuCl₂]₂ which on treatment with sorbic acid and KOTf in Et₂O in the presence of zinc gave the title hydrogenation catalyst, [Cp*Ru(sorbic acid)]OTf. [Cp*Ru(sorbic acid)]OTf catalyzed selective photochem. hydrogenation of sorbic acid in nitromethane gave cis-3-hexenoic acid with 96.9% selectivity.

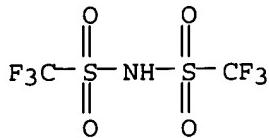
IT 90076-65-6

RL: CAT (Catalyst use); RCT (Reactant); RACT (Reactant or reagent); USES (Uses)

(process for preparation of ruthenium catalysts for selective hydrogenation of dienes to produce cis alkenes)

RN 90076-65-6 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME)



● Li

IT 666252-14-8P 666252-22-8P 666252-25-1P

RL: CAT (Catalyst use); SPN (Synthetic preparation); PREP (Preparation);
USES (Uses)

(process for preparation of ruthenium catalysts for selective hydrogenation
of dienes to produce cis alkenes)

RN 666252-14-8 CAPLUS

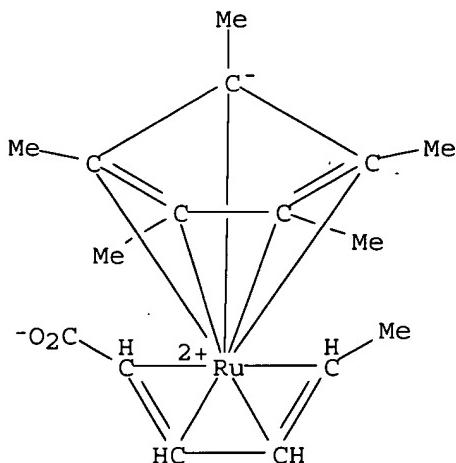
CN Ruthenium, [(2,3,4,5-η)-(2E,4E)-2,4-hexadienoato][(1,2,3,4,5-η)-
1,2,3,4,5-pentamethyl-2,4-cyclopentadien-1-yl]-, compd. with
1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1)
(9CI) (CA INDEX NAME)

CM 1

CRN 263748-26-1

CMF C16 H22 O2 Ru

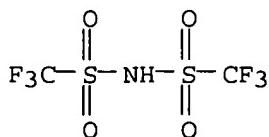
CCI CCS



CM 2

CRN 82113-65-3

CMF C2 H F6 N O4 S2



RN 666252-22-8 CAPLUS

CN Ruthenium(1+), [(2,3,4,5-η)-(2E,4E)-2,4-hexadien-1-ol][(1,2,3,4,5-

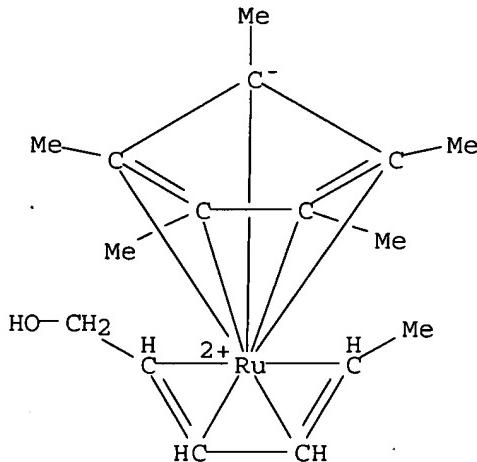
η -1,2,3,4,5-pentamethyl-2,4-cyclopentadien-1-yl]-, salt with
1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1)
(9CI) (CA INDEX NAME)

CM 1

CRN 666252-16-0

CMF C16 H25 O Ru

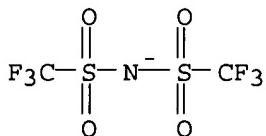
CCI CCS



CM 2

CRN 98837-98-0

CMF C2 F6 N O4 S2



RN 666252-25-1 CAPLUS

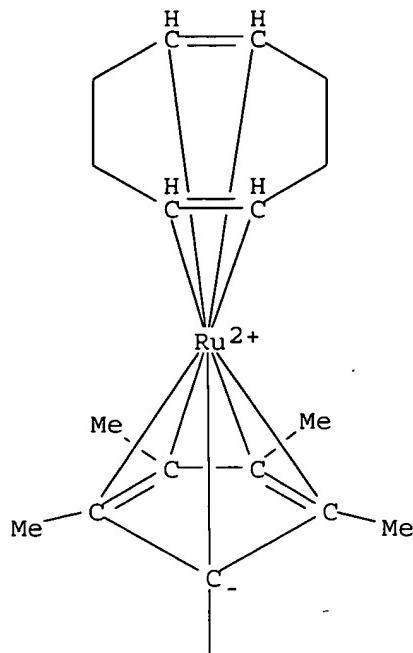
CN Ruthenium(1+), [(1,2,5,6- η)-1,5-cyclooctadiene][(1,2,3,4,5- η)-
1,2,3,4,5-pentamethyl-2,4-cyclopentadien-1-yl]-, salt with
1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1)
(9CI) (CA INDEX NAME)

CM 1

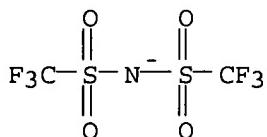
CRN 666252-23-9

CMF C18 H27 Ru

CCI CCS



CM 2

CRN 98837-98-0
CMF C2 F6 N O4 S2RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L14 ANSWER 43 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2004:147123 CAPLUS
 DN 140:245516
 TI Electroanalytical Determination of Trace Chloride in Room-Temperature Ionic Liquids
 AU Villagran, Constanza; Banks, Craig E.; Hardacre, Christopher; Compton, Richard G.
 CS QUILL Centre and The School of Chemistry, Queen's University Belfast, Belfast, BT9 5AG, UK
 SO Analytical Chemistry (2004), 76(7), 1998-2003
 CODEN: ANCHAM; ISSN: 0003-2700
 PB American Chemical Society

DT Journal
LA English
AB The electroanal. quantification of chloride in [C4mim] [BF4], [C4mim] [NTf2], and [C4mim] [PF6] ionic liqs. was explored using linear sweep and square wave voltammetry. Cathodic stripping voltammetry at a Ag disk electrode is the most sensitive. The methodol. is based on 1st holding the potential of the electrode at +2.0 V (vs. Ag wire), to accumulate Ag chloride at the electrode. On applying a cathodic scan, a stripping wave is observed corresponding to the reduction of the Ag chloride. This stripping protocol was found to detect ppb levels of chloride in [C4mim] [BF4], [C4mim] [NTf2], and [C4mim] [PF6]. Although other methods for chloride are reported for [BF4]- and [PF6]-based ionic liqs., no methods are reported for [NTf2]- ionic liqs.

IT 174899-83-3, 1-Butyl-3-methylimidazolium bis(trifluoromethanesulfonylimide)
RL: AMX (Analytical matrix); ANST (Analytical study)
(electroanal. determination of trace chloride in room-temperature ionic liqs. by voltammetry)

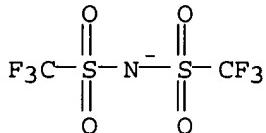
RN 174899-83-3 CAPLUS

CN 1H-Imidazolium, 1-butyl-3-methyl-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 98837-98-0

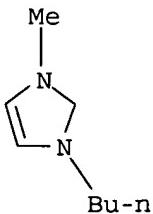
CMF C2 F6 N O4 S2



CM 2

CRN 80432-08-2

CMF C8 H15 N2



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
RE.CNT 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 44 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2004:142661 CAPLUS

DN 140:166815

TI Devices incorporating electrochemical cells such as fuel cells and gas sensors

IN Rohrl, Andreas

PA Germany
 SO U.S. Pat. Appl. Publ., 9 pp.
 CODEN: USXXCO
 DT Patent
 LA English
 FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|---|----------|----------------------------|-----------------|----------|
| PI | US 2004033414 | A1 | 20040219 | US 2002-218262 | 20020814 |
| | WO 2004017443 | A2 | 20040226 | WO 2003-US24546 | 20030806 |
| | WO 2004017443 | A3 | 20050623 | | |
| | W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | US 2002-218262 A 20020814 | | |
| EP 1563287 | A2 | 20050817 | EP 2003-788331 | 20030806 | |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK | | US 2002-218262 A 20020814 | | |
| | | | WO 2003-US24546 W 20030806 | | |

AB The invention concerns an electrochem. cell for applications such as electrochem. fuel cells, or electrochem. cell gas sensors used for detection of target gas species in environments containing or susceptible to presence of same. The electrochem. cell utilizes an ionic liquid as an electrolyte medium, thereby achieving a broader range of operational temps. and conditions, relative to electrochem. cells utilizing propylene carbonate or other conventional electrolytic media.

IT 174899-82-2 174899-83-3

RL: DEV (Device component use); USES (Uses)
 (devices incorporating electrochem. cells such as fuel cells and gas sensors)

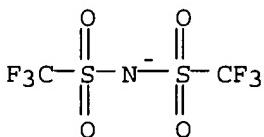
RN 174899-82-2 CAPLUS

CN 1H-Imidazolium, 1-ethyl-3-methyl-, salt with 1,1,1-trifluoro-N-[trifluoromethyl]sulfonyl)methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 98837-98-0

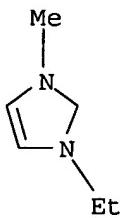
CMF C2 F6 N O4 S2



CM 2

CRN 65039-03-4

CMF C6 H11 N2



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

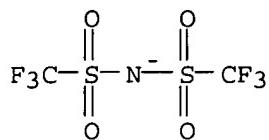
RN 174899-83-3 CAPLUS

CN 1H-Imidazolium, 1-butyl-3-methyl-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 98837-98-0

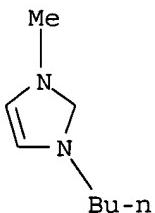
CMF C2 F6 N O4 S2



CM 2

CRN 80432-08-2

CMF C8 H15 N2



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

L14 ANSWER 45 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2004:117314 CAPLUS

DN 140:131179

TI Silver vanadium oxide provided with a metal oxide coating for cathodes of lithium batteries

IN Leising, Randolph; Takeuchi, Esther S.

PA Wilson Greatbatch Technologies, Inc., USA

SO Eur. Pat. Appl., 13 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

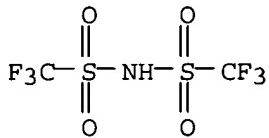
| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|------------|------|----------|-----------------|----------|
| PI | EP 1388905 | A2 | 20040211 | EP 2003-254869 | 20030805 |
| | EP 1388905 | A3 | 20050511 | | |

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
 US 2002-401425P P 20020806
 US 2004029005 A1 20040212 US 2003-631097 20030731
 CA 2436380 AA 20040206 US 2002-401425P P 20020806
 JP 2004134384 A2 20040430 CA 2003-2436380 20030801
 US 2002-401425P P 20020806
 JP 2003-287313 20030806
 US 2002-401425P P 20020806
 US 2003-631097 A 20030731

AB An improved cathode material for nonaq. electrolyte lithium electrochem. cell is described. The preferred active material is e-phase silver vanadium oxide (Ag₂V₄O₁₁) coated with a protective layer of a metal oxide, preferably γ -phase SVO (Ag_{1.2}V₃O_{1.8}). The SVO core provides high capacity and rate capability while the protective coating reduces reactivity of the active particles with electrolyte to improve the long-term stability of the cathode.

IT 90076-65-6
 RL: DEV (Device component use); USES (Uses)
 (silver vanadium oxide provided with metal oxide coating for cathodes of lithium batteries)

RN 90076-65-6 CAPLUS
 CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME)

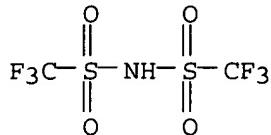


● Li

L14 ANSWER 46 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2004:98935 CAPLUS
 DN 140:270435
 TI Evidence that protons can be the active catalysts in Lewis acid mediated hetero-Michael addition reactions
 AU Wabnitz, Tobias C.; Yu, Jin-Quan; Spencer, Jonathan B.
 CS Cambridge University Chemical Laboratory, Cambridge, CB2 1EW, UK
 SO Chemistry--A European Journal (2004), 10(2), 484-493
 CODEN: CEUJED; ISSN: 0947-6539
 PB Wiley-VCH Verlag GmbH & Co. KGaA
 DT Journal
 LA English
 OS CASREACT 140:270435
 AB The mechanism of Lewis acid catalyzed hetero-Michael addition reactions of weakly basic nucleophiles to α,β -unsatd. ketones was investigated. Protons, rather than metal ions, were identified as the active catalysts. Other mechanisms have been ruled out by analyses of side products and of stoichiometric enone-catalyst mixts. and by the use of radical inhibitors. No evidence for the involvement of π -olefin-metal complexes or for carbonyl-metal-ion interactions was obtained. The reactions did not proceed in the presence of the non-coordinating base 2,6-di-tert-butylpyridine. An excellent correlation of catalytic activities with cation hydrolysis consts. was obtained. Different reactivities of mono- and dicarbonyl substrates have been rationalized. A 1H NMR probe for the assessment of proton generation was

established and Lewis acids have been classified according to their propensity to hydrolyze in organic solvents. Bronsted acid-catalyzed conjugate addition reactions of nitrogen, oxygen, sulfur and carbon nucleophiles are developed and implications for asym. Lewis acid catalysis are discussed.

- IT 82113-65-3, Bis(trifluoromethanesulfonyl)imide
 RL: CAT (Catalyst use); USES (Uses)
 (evidence that protons can be the active catalysts in Lewis acid mediated hetero-Michael addition reactions)
- RN 82113-65-3 CAPLUS
- CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]- (9CI)
 (CA INDEX NAME)



RE.CNT 82 THERE ARE 82 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 47 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2004:78583 CAPLUS
 DN 140:114276
 TI Battery structures, self-organizing devices and related methods
 IN Gozdz, Antoni S.; Holman, Richard K.; Loxley, Andrew; Wilkins, Ronnie
 PA A123 Systems, Inc., USA
 SO U.S. Pat. Appl. Publ., 15 pp., Cont.-in-part of U.S. Ser. No. 206,662.
 CODEN: USXXCO
 DT Patent
 LA English

FAN.CNT 4

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|-------------|
| PI US 2004018431 | A1 | 20040129 | US 2003-354673 | 20030130 |
| | | | US 2002-206662 | A2 20020726 |
| US 2003099884 | A1 | 20030529 | US 2002-206662 | 20020726 |
| | | | US 2001-308360P | P 20010727 |
| | | | US 2001-21740 | A2 20011022 |
| WO 2004068618 | A2 | 20040812 | WO 2004-US2829 | 20040130 |
| WO 2004068618 | A3 | 20050407 | | |
| W: AE, AE, AG, AL, AL, AM, AM, AM, AT, AT, AU, AZ, AZ, BA, BB, BG, BG, BR, BR, BY, BY, BZ, BZ, CA, CH, CN, CN, CO, CO, CR, CR, CU, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EC, EE, EE, EG, ES, ES, FI, FI, GB, GD, GE, GE, GH, GM, HR, HR, HU, HU, ID, IL, IN, IS, JP, JP, KE, KE, KG, KG, KP, KP, KR, KR, KZ, KZ, KZ, LC, LK, LR, LS, LS, LT, LU, LV, MA, MD, MD, MG, MG, MN, MN, MW, MW, MX, MX, MZ, MZ, NA, NI | | | | |
| | | | US 2003-354673 | A 20030130 |

PATENT FAMILY INFORMATION:

FAN 2002:408971

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|----------|
| PI WO 2002043168 | A2 | 20020530 | WO 2001-US48345 | 20011022 |
| WO 2002043168 | A3 | 20030724 | | |
| WO 2002043168 | C2 | 20031204 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, | | | | |

| | | | | |
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| | PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG,
UZ, VN, YU, ZA, ZW | | | |
| RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AM, AZ, BY, KG,
KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR,
IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN,
GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| CA 2426156 | AA | 20020530 | US 2000-242124P
CA 2001-2426156
US 2000-242124P
WO 2001-US48345 | P 20001020
20011022
P 20001020
W 20011022 |
| AU 2002041629 | A5 | 20020603 | AU 2002-41629
US 2000-242124P
WO 2001-US48345 | 20011022
P 20001020
W 20011022 |
| EP 1352436 | A2 | 20031015 | EP 2001-988312 | 20011022 |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | US 2000-242124P
WO 2001-US48345 | P 20001020
W 20011022 |
| JP 2004525481 | T2 | 20040819 | JP 2002-544796
US 2000-242124P
WO 2001-US48345 | 20011022
P 20001020
W 20011022 |
| FAN 2003:118181 | | | | |
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
| ----- | ----- | ----- | ----- | ----- |
| PI WO 2003012908 | A2 | 20030213 | WO 2002-US23880 | 20020726 |
| WO 2003012908 | C1 | 20040219 | | |
| WO 2003012908 | C2 | 20040325 | | |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
UA, UG, UZ, VN, YU, ZA, ZW | | | |
| RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF,
CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | US 2001-308360P
US 2001-21740 | P 20010727
A 20011022 |
| US 2003082446 | A1 | 20030501 | US 2001-21740
US 2000-242124P | 20011022
P 20001020 |
| CA 2455819 | AA | 20030213 | CA 2002-2455819
US 2001-308360P
US 2001-21740 | 20020726
P 20010727
A 20011022 |
| WO 2002-US23880 | | | | W 20020726 |
| EP 1433217 | A2 | 20040630 | EP 2002-768358 | 20020726 |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK | | US 2001-308360P
US 2001-21740 | P 20010727
A 20011022 |
| JP 2005525674 | T2 | 20050825 | WO 2002-US23880
JP 2003-517975
US 2001-308360P | W 20020726
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P 20010727 |
| | | | US 2001-21740 | A 20011022 |
| | | | WO 2002-US23880 | W 20020726 |
| FAN 2003:413937 | | | | |
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
| ----- | ----- | ----- | ----- | ----- |
| PI US 2003099884 | A1 | 20030529 | US 2002-206662
US 2001-308360P | 20020726
P 20010727 |
| US 2003082446 | A1 | 20030501 | US 2001-21740
US 2000-242124P | A2 20011022
P 20001020 |
| | | | US 2001-21740 | 20011022 |
| | | | US 2000-242124P | |

US 2004018431

A1 20040129

US 2003-354673

20030130

US 2002-206662

A2 20020726

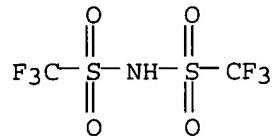
AB An electrochem. device includes a first electrode in elec. communication with a first current collector, a second electrode in elec. communication with a second current collector and a crosslinked solid polymer in contact with the first and second electrodes. At least one of the first and second electrodes includes a network of elec. connected particles comprising an electroactive material, and the particles of one electrode exert a repelling force on the other electrode when the first and second electrodes are combined with an uncrosslinked precursor to the solid polymer.

IT 90076-65-6

RL: DEV (Device component use); USES (Uses)
(battery structures, self-organizing devices and related methods)

RN 90076-65-6 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME)



● Li

L14 ANSWER 48 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2004:42452 CAPLUS

DN 140:235656

TI The first 1-alkyl-3-perfluoroalkyl-4,5-dimethyl-1,2,4-triazolium salts

AU Xue, Hong; Twamley, Brendan; Shreeve, Jeanne M.

CS Department of Chemistry, University of Idaho, Moscow, ID, 83843-2343, USA

SO Journal of Organic Chemistry (2004), 69(4), 1397-1400

CODEN: JOCEAH; ISSN: 0022-3263

PB American Chemical Society

DT Journal

LA English

OS CASREACT 140:235656

AB Syntheses of quaternary 1-alkyl-3-perfluoroalkyl-4,5-dimethyl-1,2,4-triazolium iodides I ($\text{R}_1 = \text{CF}_3$; $\text{R}_2 = \text{Me}$, $\text{CH}_2\text{CH}_2\text{CH}_2\text{F}$; $\text{X} = \text{I}$; $\text{R}_1 = \text{C}_8\text{F}_{17}$; $\text{R}_2 = \text{Me}$; $\text{X} = \text{NTf}_2$, ClO_4 , BF_4 ; $\text{R}_1 = \text{CF}_3$; $\text{R}_2 = \text{Me}$; $\text{X} = \text{OTf}$; $\text{R}_1 = \text{CF}_3$; $\text{R}_2 = \text{CH}_2\text{CH}_2\text{CH}_2\text{F}$; $\text{X} = \text{NTf}_2$) by metathesis reactions. I were obtained in excellent yields and were thermally stable and had relatively low m.ps. The structure of I [$\text{R}_1 = \text{C}_8\text{F}_{17}$; $\text{R}_2 = \text{Me}$; $\text{X} = \text{BF}_4$ (II)] was confirmed by single-crystal X-ray anal. The mol. weight of II (cation) is 3-fold greater than that of the 3-trifluoromethyl derivative, its m.p. is 32 °C lower.

IT 667873-35-0P 667873-44-1P 667873-47-4P

RL: SPN (Synthetic preparation); PREP (Preparation)

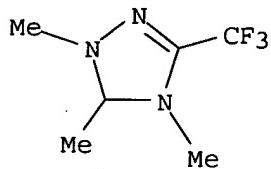
(preparation of alkyl(perfluoroalkyl)dimethyltriazolium salts via condensation of perfluoroalkanoates with hydrazine followed by heterocyclization, N-alkylation with alkyl iodides, N'-alkylation, and metathesis with metal salts)

RN 667873-35-0 CAPLUS

CN 1H-1,2,4-Triazolium, 1,4,5-trimethyl-3-(trifluoromethyl)-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

CM 1

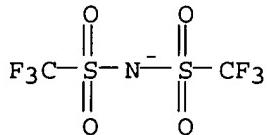
CRN 667873-34-9
CMF C6 H9 F3 N3



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CM 2

CRN 98837-98-0
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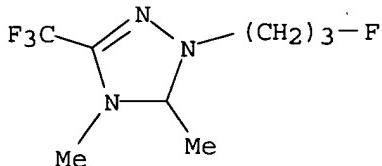


RN 667873-44-1 CAPLUS

CN 1H-1,2,4-Triazolium, 1-(3-fluoropropyl)-4,5-dimethyl-3-(trifluoromethyl)-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

CM 1

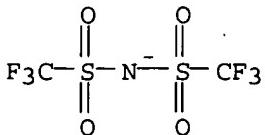
CRN 667873-43-0
CMF C8 H12 F4 N3



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

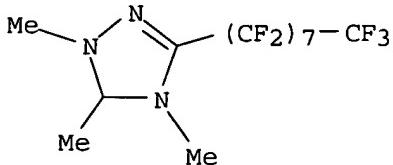
CRN 98837-98-0
CMF C2 F6 N O4 S2



RN 667873-47-4 CAPLUS
CN 1H-1,2,4-Triazolium, 3-(heptadecafluoroctyl)-1,4,5-trimethyl-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

CM 1

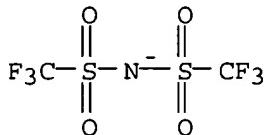
CRN 667873-46-3
CMF C13 H9 F17 N3



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 98837-98-0
CMF C2 F6 N O4 S2



RE.CNT 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 49 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2004:39666 CAPLUS
DN 140:79836
TI Electrolyte of lithium-sulfur batteries
IN Kim, Seok; Jung, Yongju; Kim, Jan-Dee
PA Samsung SDI Co., Ltd, S. Korea
SO U.S. Pat. Appl. Publ., 15 pp.
CODEN: USXXCO

DT Patent
LA English

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---------------|------|----------|-----------------|------------|
| PI | US 2004009393 | A1 | 20040115 | US 2003-617230 | 20030711 |
| | | | | KR 2002-40707 | A 20020712 |
| JP | 2005108438 | A2 | 20050421 | JP 2003-183188 | 20030626 |
| | | | | KR 2002-40707 | A 20020712 |
| CN | 1487620 | A | 20040407 | CN 2003-154619 | 20030712 |
| | | | | KR 2002-40707 | A 20020712 |

AB An electrolyte for use in a lithium-sulfur battery includes salts having imide anions. The electrolyte may further include salts having organic cations. When lithium-sulfur batteries include salts having imide anions as electrolytes, the sulfur utilization is increased, and cycle life characteristics and discharge characteristics such as discharge capacity and average discharge voltage are improved.

IT 82113-65-3, Bis(trifluoromethylsulfonyl)imide 90076-65-6

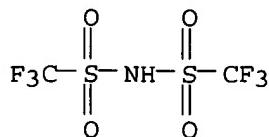
129318-46-3, Bis(perfluoroethylsulfonyl)imide 132843-44-8

216299-76-2

RL: DEV (Device component use); USES (Uses)
(electrolyte of lithium-sulfur batteries)

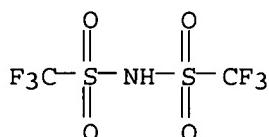
RN 82113-65-3 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]- (9CI)
(CA INDEX NAME)



RN 90076-65-6 CAPLUS

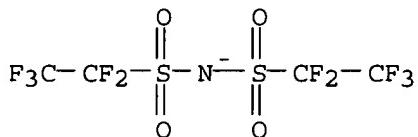
CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-,
lithium salt (9CI) (CA INDEX NAME)



● Li

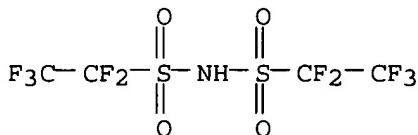
RN 129318-46-3 CAPLUS

CN Ethanesulfonamide, 1,1,2,2,2-pentafluoro-N-[(pentafluoroethyl)sulfonyl]-,
ion(1-) (9CI) (CA INDEX NAME)



RN 132843-44-8 CAPLUS

CN Ethanesulfonamide, 1,1,2,2,2-pentafluoro-N-[(pentafluoroethyl)sulfonyl]-,
lithium salt (9CI) (CA INDEX NAME)



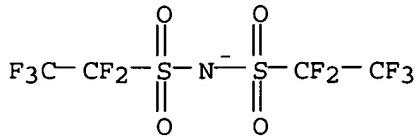
● Li

RN 216299-76-2 CAPLUS

CN 1H-Imidazolium, 1-ethyl-3-methyl-, salt with 1,1,2,2,2-pentafluoro-N-
[(pentafluoroethyl)sulfonyl]ethanesulfonamide (1:1) (9CI) (CA INDEX NAME)

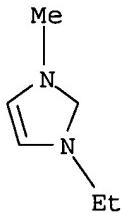
CM 1

CRN 129318-46-3
CMF C4 F10 N O4 S2



CM 2

CRN 65039-03-4
CMF C6 H11 N2



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

L14 ANSWER 50 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2003:1007693 CAPLUS
DN 140:50320
TI Photoresist composition for deep ultraviolet lithography comprising a mixture of photoactive compounds
IN Padmanaban, Munirathna; Kudo, Takanori; Lee, Sangho; Dammel, Ralph R.; Rahman, M. Dalil
PA USA
SO U.S. Pat. Appl. Publ., 25 pp., Cont.-in-part of U.S. Ser. No. 170,761.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 2

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---------------|------|----------|-----------------|-------------|
| PI | US 2003235782 | A1 | 20031225 | US 2003-439472 | 20030516 |
| | US 2003235775 | A1 | 20031225 | US 2002-170761 | A2 20020613 |
| | | | | US 2002-170761 | 20020613 |

PATENT FAMILY INFORMATION:

FAN 2003:1007247

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|--|------|----------|-----------------|------------|
| PI | WO 2003107093 | A2 | 20031224 | WO 2003-EP6139 | 20030611 |
| | WO 2003107093 | A3 | 20040401 | | |
| | W: CN, JP, KR, SG | | | | |
| | RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR | | | | |
| | | | | US 2002-170761 | A 20020613 |
| | US 2003235775 | A1 | 20031225 | US 2002-170761 | 20020613 |
| | EP 1516229 | A2 | 20050323 | EP 2003-759932 | 20030611 |

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, SK

US 2002-170761 A 20020613
WO 2003-EP6139 W 20030611

OS MARPAT 140:50320

AB The present invention relates to a novel photoresist composition that can be developed with an aqueous alkaline solution, and is capable of being imaged at exposure wavelengths in the deep UV. The invention also relates to a process for imaging the novel photoresist as well as novel photoacid generators.

IT 636597-05-2P 636597-06-3P 636597-07-4P

RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(photoresist composition for deep UV lithog. comprising mixture of photoactive compds.)

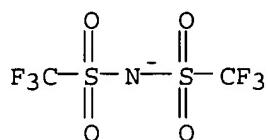
RN 636597-05-2 CAPLUS

CN Sulfonium, (4-hydroxy-3,5-dimethylphenyl)dimethyl-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 98837-98-0

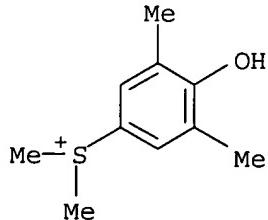
CMF C2 F6 N O4 S2



CM 2

CRN 57836-01-8

CMF C10 H15 O S



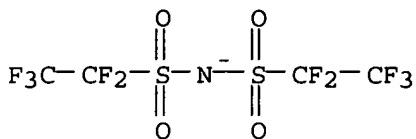
RN 636597-06-3 CAPLUS

CN Sulfonium, (4-hydroxy-3,5-dimethylphenyl)dimethyl-, salt with 1,1,2,2,2-pentafluoro-N-[(pentafluoroethyl)sulfonyl]ethanesulfonamide (1:1) (9CI) (CA INDEX NAME)

CM 1

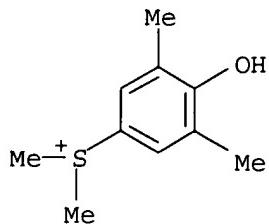
CRN 129318-46-3

CMF C4 F10 N O4 S2



CM 2

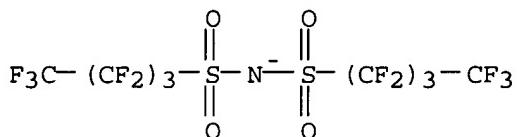
CRN 57836-01-8
CMF C10 H15 O S



RN 636597-07-4 CAPLUS
CN Sulfonium, (4-hydroxy-3,5-dimethylphenyl)dimethyl-, salt with 1,1,2,2,3,3,4,4,4-nonafluoro-N-[(nonafluorobutyl)sulfonyl]-1-butanesulfonamide (1:1) (9CI) (CA INDEX NAME)

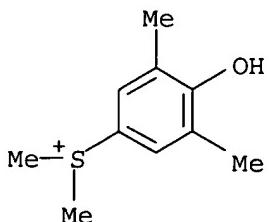
CM 1

CRN 191101-38-9
CMF C8 F18 N O4 S2



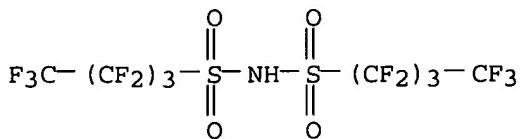
CM 2

CRN 57836-01-8
CMF C10 H15 O S

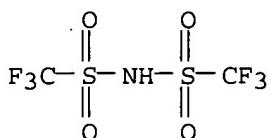


IT 39847-39-7 82113-65-3 152894-10-5
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of photoactive compds. for photoresist composition for deep UV lithog.)

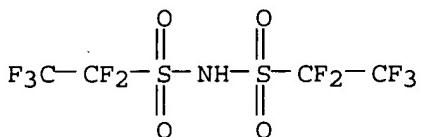
RN 39847-39-7 CAPLUS
 CN 1-Butanesulfonamide, 1,1,2,2,3,3,4,4,4-nonafluoro-N-[(nonafluorobutyl)sulfonyl]- (9CI) (CA INDEX NAME)



RN 82113-65-3 CAPLUS
 CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]- (9CI) (CA INDEX NAME)



RN 152894-10-5 CAPLUS
 CN Ethanesulfonamide, 1,1,2,2,2-pentafluoro-N-[(pentafluoroethyl)sulfonyl]- (9CI) (CA INDEX NAME)



L14 ANSWER 51 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2003:1007247 CAPLUS
 DN 140:50314
 TI Photoresist composition for deep ultraviolet lithography comprising a mixture of photoactive compounds
 IN Padmanaban, Munirathna; Kudo, Takanori; Lee, Sangho; Dammel, Ralph R.; Rahman, Dalil M.
 PA Clariant International Ltd., Switz.
 SO PCT Int. Appl., 63 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 2

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---|------|----------|-----------------|------------|
| PI | WO 2003107093 | A2 | 20031224 | WO 2003-EP6139 | 20030611 |
| | WO 2003107093 | A3 | 20040401 | | |
| | W: CN, JP, KR, SG
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR | | | US 2002-170761 | A 20020613 |
| US | 2003235775 | A1 | 20031225 | US 2002-170761 | 20020613 |
| EP | 1516229 | A2 | 20050323 | EP 2003-759932 | 20030611 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, SK | | | US 2002-170761 | A 20020613 |

PATENT FAMILY INFORMATION:

PAN 2003:1007693

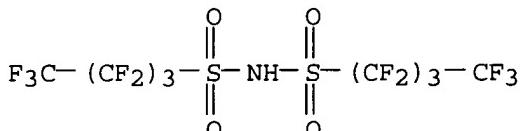
| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---------------|------|----------|----------------------------------|-------------------------|
| PI | US 2003235782 | A1 | 20031225 | US 2003-439472
US 2002-170761 | 20030516
A2 20020613 |
| | US 2003235775 | A1 | 20031225 | US 2002-170761 | 20020613 |

OS MARPAT 140:50314

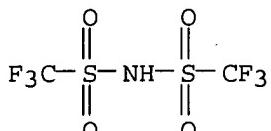
AB The present invention relates to a novel photoresist composition that can be developed with an aqueous alkaline solution, and is capable of being imaged at exposure wavelengths in the deep UV. The invention also relates to a process for imaging the novel photoresist as well as novel photoacid generators. The composition shows good sensitivity and provides a photoresist of reduced edge roughness.

IT 39847-39-7, Bis(perfluorobutylsulfonyl)amine 82113-65-3,
 Bis(trifluoromethanesulfonyl)amine 129318-46-3D,
 Bis(perfluoroethylsulfonyl)imide, lithium salt
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (photoresist composition for deep UV lithog. comprising a mixture of
 photoactive compds.)

RN 39847-39-7 CAPLUS

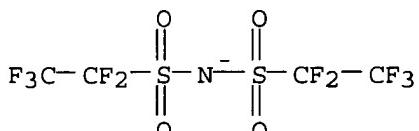
CN 1-Butanesulfonamide, 1,1,2,2,3,3,4,4,4-nonafluoro-N-
 [(nonafluorobutyl)sulfonyl]- (9CI) (CA INDEX NAME)

RN 82113-65-3 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]- (9CI)
 (CA INDEX NAME)

RN 129318-46-3 CAPLUS

CN Ethanesulfonamide, 1,1,2,2,2-pentafluoro-N-[(pentafluoroethyl)sulfonyl]-, ion(1-) (9CI) (CA INDEX NAME)



IT 636597-05-2P 636597-06-3P 636597-07-4P

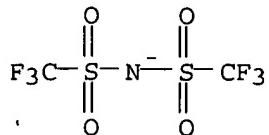
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (photoresist composition for deep UV lithog. comprising a mixture of
 photoactive compds.)

RN 636597-05-2 CAPLUS

CN Sulfonium, (4-hydroxy-3,5-dimethylphenyl)dimethyl-, salt with
1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1)
(9CI) (CA INDEX NAME)

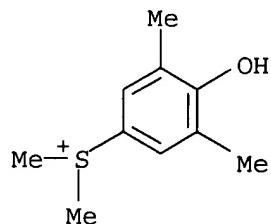
CM 1

CRN 98837-98-0
CMF C2 F6 N O4 S2



CM 2

CRN 57836-01-8
CMF C10 H15 O S

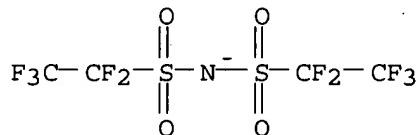


RN 636597-06-3 CAPLUS

CN Sulfonium, (4-hydroxy-3,5-dimethylphenyl)dimethyl-, salt with
1,1,2,2,2-pentafluoro-N-[(pentafluoroethyl)sulfonyl]ethanesulfonamide
(1:1) (9CI) (CA INDEX NAME)

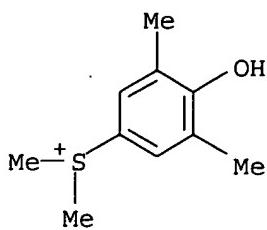
CM 1

CRN 129318-46-3
CMF C4 F10 N O4 S2



CM 2

CRN 57836-01-8
CMF C10 H15 O S



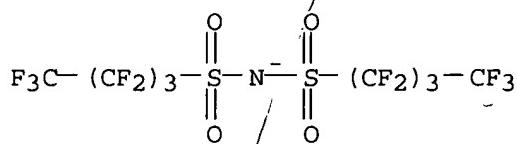
RN 636597-07-4 CAPLUS

CN Sulfonium, (4-hydroxy-3,5-dimethylphenyl)dimethyl-, salt with
1,1,2,2,3,3,4,4,4-nonafluoro-N-[(nonafluorobutyl)sulfonyl]-1-
butanesulfonamide (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 191101-38-9

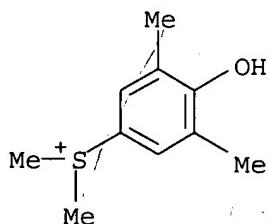
CMF C8 F18 N O4 S2



CM 2

CRN 57836-01-8

CMF C10 H15 O S



L14 ANSWER 52 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2003:897739 CAPLUS

DN 139:381010

TI Lewis acid catalyst compositions and method for recovery of Lewis acid catalysts from organic reaction mixtures

IN Nishikido, Jōji; Kamishima, Mayumi

PA Asahi Kasei Corporation, Japan; Noguchi Research Institute

SO Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

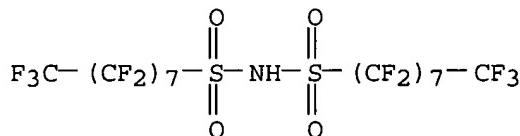
DT Patent

LA Japanese

FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----------------------|------|----------|-----------------|----------|
| JP 2003326173 | A2 | 20031118 | JP 2002-137734 | 20020513 |
| OS MARPAT 139:381010 | | | JP 2002-137734 | 20020513 |

AB The compns. contain CO₂ vehicle, and [(RfSO₂)_nM and/or [(RfSO₂)_nC] M
 (Rf = C₂≥ fluorohydrocarbyl; M = H, rare earth metal, transition
 metal, Cd, Ga, In, Tl, Si, Ge, Sn, Pb, As, Sb, Bi, Se, and Te; n = number
 equal to valence of M). The method includes treatment of starting
 materials with the compns. containing supercrit. CO₂, converting CO₂ from
 supercrit. to liquid state, and separating the catalysts from reaction mixts.
 Thus, 99% Yb tris[bis(perfluorooctanesulfonyl)imide] was recovered from a
 anisole-Ac₂O acetylation reaction mixture containing p-methoxyacetophenone
 (yield 88%) and liquid CO₂ by the method.
 IT 39847-41-1P, Bis(perfluorooctanesulfonyl)imide
 RL: CAT (Catalyst use); PUR (Purification or recovery); RCT (Reactant);
 PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
 (recovery of Lewis acid catalysts from organic reaction mixts. by
 conversion of CO₂ from supercrit. to liquid state)
 RN 39847-41-1 CAPLUS
 CN 1-Octanesulfonamide, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8-heptadecafluoro-N-
 [(heptadecafluoroctyl)sulfonyl]- (9CI) (CA INDEX NAME)



L14 ANSWER 53 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2003:853314 CAPLUS
 DN 139:343479
 TI Sulfonium compounds as radiation-sensitive acid generators and resist
 compositions containing them
 IN Kodama, Kunihiko
 PA Fuji Photo Film Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 66 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------|------|----------|----------------------------------|----------------------|
| PI JP 2003307839 | A2 | 20031031 | JP 2002-112372
JP 2002-112372 | 20020415
20020415 |

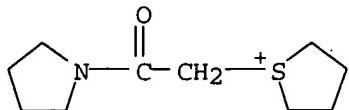
OS MARPAT 139:343479
 AB (Ba)_mAaS+Y₁Y₂ X- (I; Y₁, Y₂ = alkyl, aryl, aralkyl, heterocyclyl,
 oxoalkyl, oxoaralkyl; Y₁ and Y₂ may be bonded together to form a ring; Aa
 = direct bond, organic group; Ba = group having CONRa or SO₂NRa; Ra = H,
 alkyl; m = 1-3; X- = nonnucleophilic anion), which generate acids upon
 irradiation with actinic ray or radiation, are claimed. Also claimed are
 resist compns. containing I, pos.-working resist compns. containing I and
 resins
 which are decomposed by acids to show increased solubility to an alkaline
 developer,
 neg.-working resist compns. containing I, water-insol. alkali-soluble resins,
 and
 crosslinking agents which crosslink to the alkali-soluble resins by acids,
 etc. The resist compns. containing I show high sensitivity, resolution, and
 good
 profile, and are especially suitable for irradiation with far-UV and electron
 beam.
 IT 617692-26-9
 RL: CAT (Catalyst use); USES (Uses)
 (preparation of sulfonium compds. having amide or sulfonamide linkage as

radiation-sensitive acid generators and resist compns. containing them)

RN 617692-26-9 CAPLUS
 CN Thiophenium, tetrahydro-1-[2-oxo-2-(1-pyrrolidinyl)ethyl]-, salt with
 1,1,2,2,2-pentafluoro-N-[(pentafluoroethyl)sulfonyl]ethanesulfonamide
 (1:1) (9CI) (CA INDEX NAME)

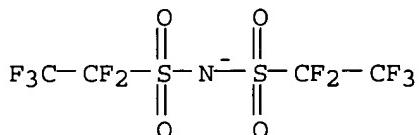
CM 1

CRN 617692-17-8
 CMF C10 H18 N O S



CM 2

CRN 129318-46-3
 CMF C4 F10 N O4 S2



L14 ANSWER 54 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2003:836939 CAPLUS
 DN 139:325782
 TI Functionalized ionic liquids for removal of acid components from sour natural gas
 IN Davis, James H., Jr.
 PA University of South Alabama, USA
 SO PCT Int. Appl., 147 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

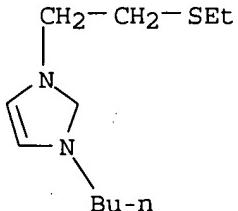
| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|---------------|--|-----------------|-----------------|------------|
| PI | WO 2003086605 | A2 | 20031023 | WO 2003-US10318 | 20030404 |
| | WO 2003086605 | A3 | 20040521 | | |
| | W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW | | | |
| | RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | US 2002-370130P | P 20020405 |
| CA 2481202 | AA | 20031023 | CA 2003-2481202 | | 20030404 |
| | | | US 2002-370130P | P 20020405 | |
| | | | WO 2003-US10318 | W 20030404 | |

| | | | | |
|--|----|----------|-----------------|------------|
| US 2004035293 | A1 | 20040226 | US 2003-407473 | 20030404 |
| JP 2005521750 | T2 | 20050721 | US 2002-370130P | P 20020405 |
| | | | JP 2003-583608 | 20030404 |
| | | | US 2002-370130P | P 20020405 |
| | | | WO 2003-US10318 | W 20030404 |
| EP 1556390 | A2 | 20050727 | EP 2003-736453 | 20030404 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, SK | | | US 2002-370130P | P 20020405 |
| | | | WO 2003-US10318 | W 20030404 |

OS MARPAT 139:325782
 AB Ionic liqs. which comprise a pendant Bronsted-acid group, e.g., a sulfonic acid group are prepared. These ionic liqs. comprising a pendant Bronsted-acidic group can be used to catalyze a Bronsted-acid catalyzed chemical reaction. These ionic liqs. comprising a pendant nucleophilic group, e.g., an amine, can be used to catalyze a nucleophile-assisted chemical reaction. Ionic liqs. comprising a pendant nucleophilic group are also suitable for removing a gaseous impurity, e.g., carbon dioxide, from a gas, e.g., sour natural gas.
 IT 613672-80-3P 613672-81-4P 613672-83-6P
 613672-85-8P 613672-90-5P 613672-92-7P
 613672-98-3P 613673-10-2P 613673-12-4P
 613673-15-7P 613673-16-8P 613673-18-0P
 613673-19-1P 613673-28-2P
 RL: IMF (Industrial manufacture); PREP (Preparation)
 (functionalized ionic liqs. for removal of acid components from sour natural gas)
 RN 613672-80-3 CAPLUS
 CN 1H-Imidazolium, 1-butyl-3-[2-(ethylthio)ethyl]-, salt with
 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1)
 (9CI) (CA INDEX NAME)

CM 1

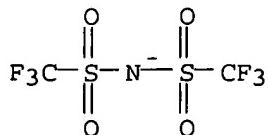
CRN 332184-70-0
 CMF C11 H21 N2 S



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

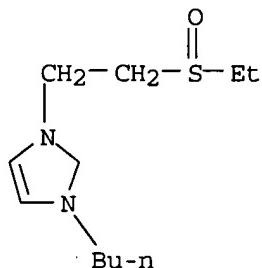
CRN 98837-98-0
 CMF C2 F6 N O4 S2



RN 613672-81-4 CAPLUS
CN 1H-Imidazolium, 1-butyl-3-[2-(ethylsulfinyl)ethyl]-, salt with
1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1)
(9CI) (CA INDEX NAME)

CM 1

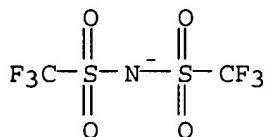
CRN 613672-78-9
CMF C11 H21 N2 O S



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

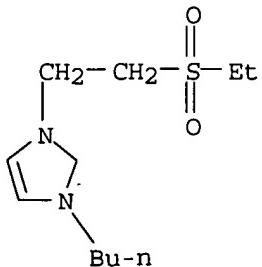
CRN 98837-98-0
CMF C2 F6 N O4 S2



RN 613672-83-6 CAPLUS
CN 1H-Imidazolium, 1-butyl-3-[2-(ethylsulfonyl)ethyl]-, salt with
1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1)
(9CI) (CA INDEX NAME)

CM 1

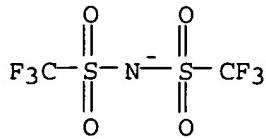
CRN 613672-82-5
CMF C11 H21 N2 O2 S



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

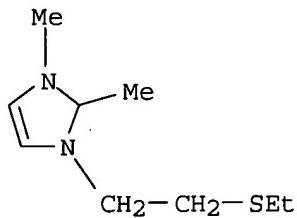
CRN 98837-98-0
CMF C2 F6 N O4 S2



RN 613672-85-8 CAPLUS
CN 1H-Imidazolium, 1-[2-(ethylthio)ethyl]-2,3-dimethyl-, salt with
1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1)
(9CI) (CA INDEX NAME)

CM 1

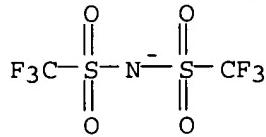
CRN 613672-84-7
CMF C9 H17 N2 S



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

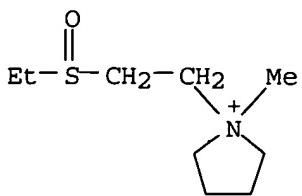
CRN 98837-98-0
CMF C2 F6 N O4 S2



RN 613672-90-5 CAPLUS
CN Pyrrolidinium, 1-[2-(ethylsulfanyl)ethyl]-1-methyl-, salt with
1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1)
(9CI) (CA INDEX NAME)

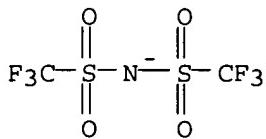
CM 1

CRN 613672-89-2
CMF C9 H20 N O S



CM 2

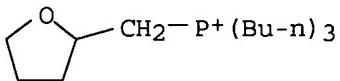
CRN 98837-98-0
CMF C2 F6 N O4 S2



RN 613672-92-7 CAPLUS
CN Phosphonium, tributyl[(tetrahydro-2-furanyl)methyl]-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

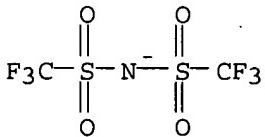
CM 1

CRN 613672-91-6
CMF C17 H36 O P



CM 2

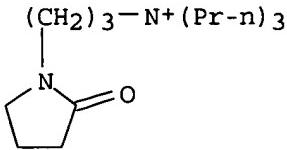
CRN 98837-98-0
CMF C2 F6 N O4 S2



RN 613672-98-3 CAPLUS
CN 1-Pyrrolidinepropanaminium, 2-oxo-N,N,N-tripropyl-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

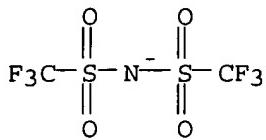
CM 1

CRN 613672-97-2
CMF C16 H33 N2 O



CM 2

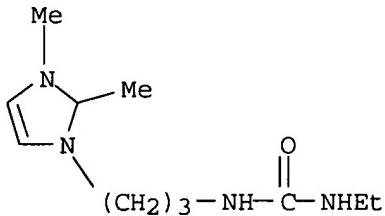
CRN 98837-98-0
CMF C2 F6 N O4 S2



RN 613673-10-2 CAPLUS
CN 1H-Imidazolium, 1-[3-[(ethylamino)carbonyl]amino]propyl-2,3-dimethyl-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

CM 1

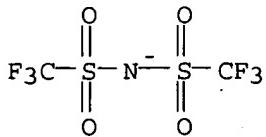
CRN 613673-09-9
CMF C11 H21 N4 O



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

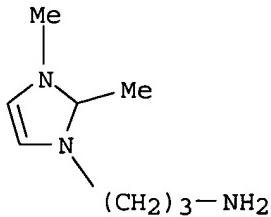
CRN 98837-98-0
CMF C2 F6 N O4 S2



RN 613673-12-4 CAPLUS
CN 1H-Imidazolium, 1-(3-aminopropyl)-2,3-dimethyl-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

CM 1

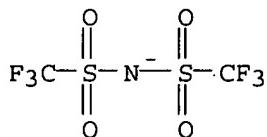
CRN 613673-11-3
CMF C8 H16 N3



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 98837-98-0
CMF C2 F6 N O4 S2

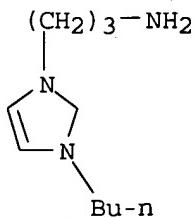


RN 613673-15-7 CAPLUS

CN 1H-Imidazolium, 1-(3-aminopropyl)-3-butyl-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

CM 1

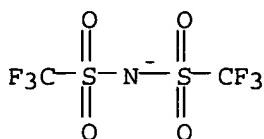
CRN 404355-26-6
CMF C10 H20 N3



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 98837-98-0
CMF C2 F6 N O4 S2



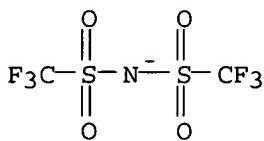
RN 613673-16-8 CAPLUS

CN Phosphonium, [3-(dimethylamino)propyl]triphenyl-, salt with
1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1)
(9CI) (CA INDEX NAME)

CM 1

CRN 98837-98-0

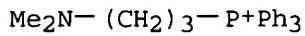
CMF C2 F6 N O4 S2



CM 2

CRN 89207-40-9

CMF C23 H27 N P



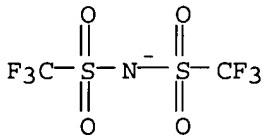
RN 613673-18-0 CAPLUS

CN Ethanaminium, 2-hydrazino-N,N,N-trimethyl-2-oxo-, salt with
1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1)
(9CI) (CA INDEX NAME)

CM 1

CRN 98837-98-0

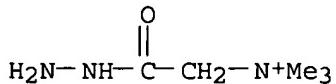
CMF C2 F6 N O4 S2



CM 2

CRN 50857-66-4

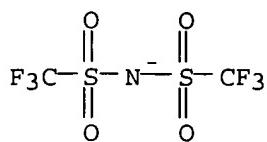
CMF C5 H14 N3 O



RN 613673-19-1 CAPLUS
CN Ethanaminium, 2-amino-N,N,N-trimethyl-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

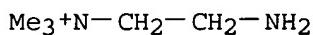
CM 1

CRN 98837-98-0
CMF C2 F6 N O4 S2



CM 2

CRN 38170-37-5
CMF C5 H15 N2

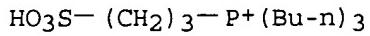


RN 613673-28-2 CAPLUS

CN Phosphonium, tributyl(3-sulfopropyl)-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

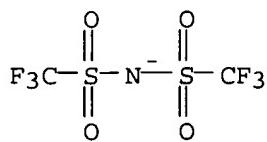
CM 1

CRN 613673-27-1
CMF C15 H34 O3 P S

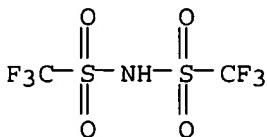


CM 2

CRN 98837-98-0
CMF C2 F6 N O4 S2

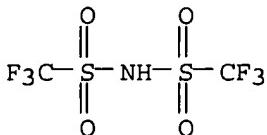


IT 82113-65-3, Bis(trifluoromethanesulfonyl)imide 90076-65-6
, Lithium bis(trifluoromethanesulfonylimide)
RL: RCT (Reactant); RACT (Reactant or reagent)
(functionalized ionic liqs. for removal of acid components from sour
natural gas)
RN 82113-65-3 CAPLUS
CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]- (9CI)
(CA INDEX NAME)



RN 90076-65-6 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME)



● Li

L14 ANSWER 55 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2003:746860 CAPLUS

DN 140:42104

TI 1-Alkyl-3-methylbenzotriazolium salts: ionic solvents and electrolytes

AU Forsyth, Stewart A.; MacFarlane, Douglas R.

CS School of Chemistry, Monash University, Victoria, 3800, Australia

SO Journal of Materials Chemistry (2003), 13(10), 2451-2456

CODEN: JMACEP; ISSN: 0959-9428

PB Royal Society of Chemistry

DT Journal

LA English

OS CASREACT 140:42104

AB A series of 1-alkyl-3-methylbenzotriazolium halides were synthesized and purified by recrystn. Novel salts of these benzotriazolium cations were obtained by metathesis with a number of diverse anions including: dicyanamide N(CN)2, mesylate CH3SO3, tosylate CH3C6H4SO3 and bis(trifluoromethane)sulfonamide N(SO2CF3)2. Thermal analyses of these very stable salts included the determination of glass transition temps. (-65 to -12 °C), m.ps. (29 to 143 °C), entropies of fusion (14 to 69 J K-1 mol-1) and decomposition temps. (up to 315 °C). Electrochem. analyses show electrochem. windows of up to ≈3.5 V, the cation producing electrochem. reduction reactions below -1 V (Ag/Ag+). Solubility data for a range of organic compds. dissolved in the new ionic liqs. and for comparison in some more common ionic liqs. are also provided.

IT 636561-66-5, 1-Methyl-3-(phenylmethyl)-1H-benzotriazolium bis(trifluoromethyl)sulfonamide

RL: PRP (Properties)

(ionic liquid; preparation and application of (alkyl)(methyl)benzotriazolium salts in ionic solvents and electrolytes)

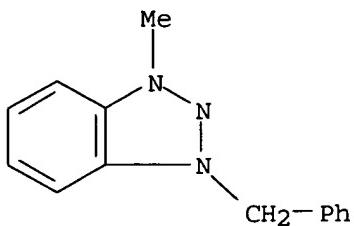
RN 636561-66-5 CAPLUS

CN 1H-Benzotriazolium, 1-methyl-3-(phenylmethyl)-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 460040-89-5

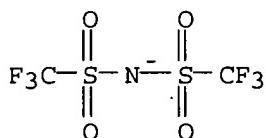
CMF C14 H14 N3



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 98837-98-0
CMF C2 F6 N O4 S2



IT 636561-62-1P, 1-Butyl-3-methyl-1H-benzotriazolium
bis(trifluoromethyl)sulfonamide

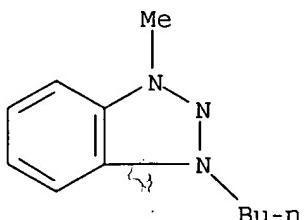
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(ionic liquid; preparation and application of (alkyl)(methyl)benzotriazolium
salts in ionic solvents and electrolytes)

RN 636561-62-1 CAPLUS

CN 1H-Benzotriazolium, 1-butyl-3-methyl-, salt with 1,1,1-trifluoro-N-
[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

CM 1

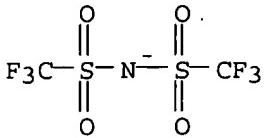
CRN 636561-59-6
CMF C11 H16 N3



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

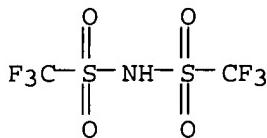
CRN 98837-98-0
CMF C2 F6 N O4 S2



IT 90076-65-6, 1,1,1-Trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide lithium salt
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (preparation and application of (alkyl)(methyl)benzotriazolium salts in
 ionic solvents and electrolytes)

RN 90076-65-6 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-,
 lithium salt (9CI) (CA INDEX NAME)



● Li

RE.CNT 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 56 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2003:730372 CAPLUS
 DN 140:65935
 TI Relative molar Gibbs energies of cation transfer from a molecular liquid
 to ionic liquids at 298.15 K
 AU Lewandowski, A.; Stepniaik, I.
 CS Faculty of Chemical Technology, Poznan University of Technology, Poznan,
 PL-60 965, Pol.
 SO Physical Chemistry Chemical Physics (2003), 5(19), 4215-4218
 CODEN: PPCPFQ; ISSN: 1463-9076
 PB Royal Society of Chemistry
 DT Journal
 LA English
 AB Molar Gibbs energies of Ag+, Cu2+, Zn2+ and Cd2+ transfer from
 dimethylsulfoxide (DMSO), a reference mol. liquid, to a number of ionic liqs.
 (IL), ΔG(DMSO→IL), were obtained from M|Mn+ electrode potentials
 at 298.15 K. The ionic liqs. consisted of various tetraalkylammonium
 cations and Cl-, Br-, BF4-, PF6- or N(CF3SO2)2- anions. The measured
 M|Mn+ (0.01 M, IL) potentials depend both on the tetraalkylammonium cation
 as well as on the anion. The transfer of cations from DMSO to ionic liqs.
 brings about pos. or neg. changes of the molar Gibbs energy. The most
 important factor influencing the transfer molar Gibbs energy is the
 anionic component of the ionic liquid, which solvates the cation. In
 general, the molar Gibbs energy of cations in ionic liqs. having
 N(CF3SO2)2- anion is lower than in those having halide or
 tetrafluoroborate anions.
 IT 174899-82-2, 1-Ethyl-3-methylimidazolium-
 bis((trifluoromethyl)sulfonyl)imide 174899-83-3,
 1-Butyl-3-methylimidazolium-bis((trifluoromethyl)sulfonyl)imide
 223437-05-6 223437-11-4
 RL: NUU (Other use, unclassified); USES (Uses)

(relative molar Gibbs energies of cation transfer from mol. liquid to
ionic liqs.)

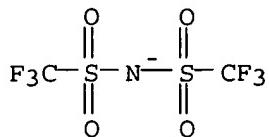
RN 174899-82-2 CAPLUS

CN 1H-Imidazolium, 1-ethyl-3-methyl-, salt with 1,1,1-trifluoro-N-
[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 98837-98-0

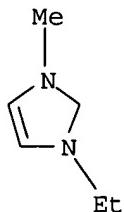
CMF C2 F6 N O4 S2



CM 2

CRN 65039-03-4

CMF C6 H11 N2



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

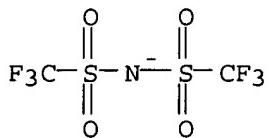
RN 174899-83-3 CAPLUS

CN 1H-Imidazolium, 1-butyl-3-methyl-, salt with 1,1,1-trifluoro-N-
[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 98837-98-0

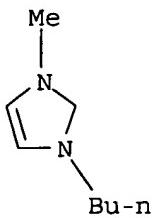
CMF C2 F6 N O4 S2



CM 2

CRN 80432-08-2

CMF C8 H15 N2



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

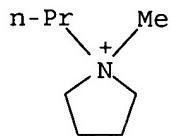
RN 223437-05-6 CAPLUS

CN Pyrrolidinium, 1-methyl-1-propyl-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 108259-90-1

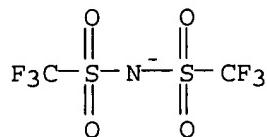
CMF C8 H18 N



CM 2

CRN 98837-98-0

CMF C2 F6 N O4 S2



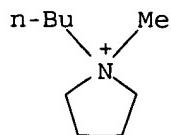
RN 223437-11-4 CAPLUS

CN Pyrrolidinium, 1-butyl-1-methyl-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 223437-10-3

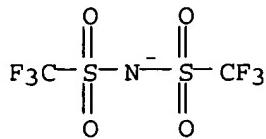
CMF C9 H20 N



CM 2

CRN 98837-98-0

CMF C2 F6 N O4 S2

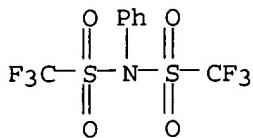


RE.CNT 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 57 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2003:596579 CAPLUS
DN 139:149457
TI Preparation of sphingoid bases for cosmetics and pharmaceuticals
IN Van Boom, Jacobs Hubertus; Van Den Berg, Richard
PA Cosmoferm B.V., Neth.
SO Jpn. Kokai Tokkyo Koho, 25 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|------------|
| JP 2003221369 | A2 | 20030805 | JP 2002-369986 | 20021220 |
| BR 2002005172 | A | 20040629 | EP 2001-205093 | A 20011220 |
| US 2003171621 | A1 | 20030911 | BR 2002-5172 | 20021210 |
| US 6852892 | B2 | 20050208 | EP 2001-205093 | A 20011220 |
| | | | US 2002-325279 | 20021220 |
| | | | EP 2001-205093 | A 20011220 |

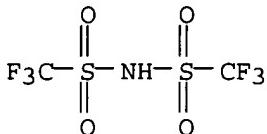
OS MARPAT 139:149457
AB R1OCH₂CH(NH₂)CH(OR₂)CH:CHR [I; R = C₅-50 (preferably C₁₃-19) hydrocarbyl; R₁, R₂ = H, C₁-10 (preferably C₁-5) hydrocarbyl] are prepared by dissoln. of R1OCH₂CH(NH₂)CH(OR₂)CHR₃'CHR4R' [R₁, R₂ = same as above; R₃', R₄ = H, OH, C₁-10 (preferably C₁-5) hydrocarbyl; R' = C₃-48 (preferably C₁₁-17) hydrocarbyl] or their salts in substantially inert solvents, protection of NH₂, activation of CHR₃', elimination reaction to form double bonds between C₄ and C₅ carbon atoms, and deprotection. Thus, (2S,3R,4E)-I (R₁ = R₂ = H, R = C₁₃H₂₇) was prepared from phytosphingosine via II, III, and IV.
IT 37595-74-7, N-Phenyltrifluoromethanesulfonimide
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of sphingosine from phytosphingosine)
RN 37595-74-7 CAPLUS
CN Methanesulfonamide, 1,1,1-trifluoro-N-phenyl-N-[(trifluoromethyl)sulfonyl]- (9CI) (CA INDEX NAME)



L14 ANSWER 58 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2003:570507 CAPLUS
DN 139:103814
TI Cathode active material coated with a metal oxide for incorporation into a

IN lithium battery for an implantable cardiac defibrillator
 Leising, Randolph; Takeuchi, Esther S.
 PA USA
 SO U.S. Pat. Appl. Publ., 8 pp.
 CODEN: USXXCO
 DT Patent
 LA English
 FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---|------|----------|-----------------|------------|
| PI | US 2003138697 | A1 | 20030724 | US 2003-350384 | 20030123 |
| | CA 2417080 | AA | 20030724 | US 2002-351947P | P 20020124 |
| | | | | CA 2003-2417080 | 20030124 |
| | | | | US 2002-351947P | P 20020124 |
| | | | | US 2003-350384 | A 20030123 |
| | EP 1331683 | A2 | 20030730 | EP 2003-1616 | 20030124 |
| | EP 1331683 | A3 | 20050810 | | |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK | | | US 2002-351947P | P 20020124 |
| | JP 2004039620 | A2 | 20040205 | JP 2003-54923 | 20030124 |
| | | | | US 2002-351947P | P 20020124 |
| AB | An improved cathode material for nonaq. electrolyte lithium electrochem. cell is disclosed. The preferred active material is silver vanadium oxide (SVO) coated with a protective layer of an inert metal oxide (M_xO_y) or lithiated metal oxide ($LixMyOz$). The SVO core provides high capacity and rate capability while the protective coating reduces reactivity of the active particles with electrolyte to improve the long-term stability of the cathode. | | | | |
| IT | 90076-65-6
RL: DEV (Device component use); USES (Uses)
(cathode active material coated with metal oxide for incorporation into lithium battery for implantable cardiac defibrillator) | | | | |
| RN | 90076-65-6 CAPLUS | | | | |
| CN | Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME) | | | | |

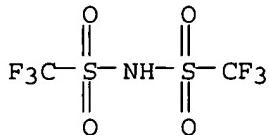


● Li

L14 ANSWER 59 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2003:551056 CAPLUS
 DN 139:87888
 TI Sandwich electrode design having relatively thin current collectors for lithium batteries
 IN Roy, Mark J.; Gan, Hong; Hallifax, Paul T.
 PA USA
 SO U.S. Pat. Appl. Publ., 7 pp.
 CODEN: USXXCO
 DT Patent
 LA English
 FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------------|------|------|-----------------|------|
|--|------------|------|------|-----------------|------|

PI US 2003134188 A1 20030717 US 2003-346998 20030117
 US 2002-349678P P 20020117
 AB A new cathode design has a first cathode active material of a relatively low energy d. but of a relatively high rate capability contacted to the outer sides of first and second cathode current collectors and a second cathode active material having a relatively high energy d. but of a relatively low rate capability in contact with the inner sides of the current collectors. The first and second current collectors have a thickness in the range of from about 0.001 in. to about 0.002 in. A conventional Li/SVO cell powering an implantable medical device has the cathode with a current collector of about 0.003 in. Even though the present current collectors are about one-half as thick as that of a conventional cell, their combined thickness means that the cell has no reduction in current carrying capacity.
 IT 90076-65-6
 RL: DEV (Device component use); USES (Uses)
 (sandwich electrode design having relatively thin current collectors for lithium batteries)
 RN 90076-65-6 CAPLUS
 CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME)



● Li

L14 ANSWER 60 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2003:529417 CAPLUS
 DN 139:87832
 TI Dual chemistry electrode design for lithium battery for cardiac defibrillator
 IN Guidi, Michael L.; Gan, Hong; Roy, Mark J.; Clare, Susan L.
 PA Wilson Greatbatch Technologies, Inc., USA
 SO Eur. Pat. Appl., 12 pp.
 CODEN: EPXXDW
 DT Patent
 LA English
 FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|--|------|----------|--|----------------------------|
| PI | EP 1326295 | A2 | 20030709 | EP 2003-15 | 20030102 |
| | EP 1326295 | A3 | 20050824 | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK | US 2002-345724P P 20020102 |
| | CA 2415881 | AA | 20030702 | CA 2003-2415881 | 20030102 |
| | US 2003129485 | A1 | 20030710 | US 2002-345724P P 20020102 | US 2003-336455 20030102 |
| | JP 2004039616 | A2 | 20040205 | JP 2003-34379 | 20030106 |
| | | | | US 2002-345724P P 20020102 | |
| AB | A new cathode design has a first cathode active material of a relatively low energy d. but of a relatively high rate capability contacted to the | | | | |

outer sides of first and second cathode current collectors and a second cathode active material having a relatively high energy d. but of a relatively low rate capability in contact with the inner sides of the current collectors. The second cathode active material has a greater peripheral extend than the current collectors and the opposed layers of the first cathode active material between which it is sandwiched. This construction helps prevent delamination by promoting improved contact of the resp. active materials to the current collectors. The present cathode design is useful for powering an implantable medical device requiring a high rate discharge application.

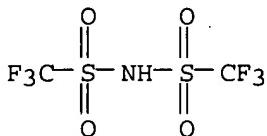
IT 90076-65-6

RL: DEV (Device component use); USES (Uses)

(dual chemical electrode design for lithium battery for cardiac defibrillator)

RN 90076-65-6 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME)



● Li

L14 ANSWER 61 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2003:510056 CAPLUS

DN 139:55490

TI Silver vanadium oxide/carbon fluoride parallel cell design within the same casing for powering an implantable medical device

IN Gan, Hong; Takeuchi, Esther S.

PA Wilson Greatbatch Technologies, Inc., USA

SO Eur. Pat. Appl., 10 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|--|------|----------|-----------------|------------|
| PI | EP 1324406 | A2 | 20030702 | EP 2002-258941 | 20021224 |
| | EP 1324406 | A3 | 20050817 | | |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK | | | US 2001-344701P | P 20011226 |
| | US 2003129484 | A1 | 20030710 | US 2002-328391 | 20021223 |
| | US 6926991 | B2 | 20050809 | | |
| | CA 2415181 | AA | 20030626 | US 2001-344701P | P 20011226 |
| | | | | CA 2002-2415181 | 20021224 |
| | | | | US 2001-344701P | P 20011226 |
| | | | | US 2002-328391 | A 20021223 |
| | JP 2004039614 | A2 | 20040205 | JP 2002-383794 | 20021226 |
| | | | | US 2001-344701P | P 20011226 |

AB A new cathode design has a first cathode active material of a relatively low energy d. but of a relatively high rate capability contacted to a first cathode current collector and a second cathode active material having a relatively high energy d. but of a relatively low rate capability in contact with a second cathode current collector. The first and second

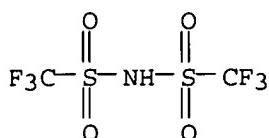
cathode current collectors are connected to a common terminal lead. The present cathode design is useful for powering an implantable medical device requiring a high rate discharge application.

IT 90076-65-6

RL: DEV (Device component use); USES (Uses)
(silver vanadium oxide/carbon fluoride parallel cell design
within same casing for powering implantable medical device)

RN 90076-65-6 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-,
lithium salt (9CI) (CA INDEX NAME)



● Li

L14 ANSWER 62 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2003:475977 CAPLUS

DN 139:351041

TI New family of anion conducting polymers: synthesis and characterization
AU Brylev, O.; Alloin, F.; Duclot, M.; Souquet, J.-L.; Sanchez, J.-Y.

CS Laboratoire d'Electrochimie et de Physicochimie des Matériaux et des
Interfaces, LEPMI, UMR 5631, CNRS-INPG-UJF, Saint-Martin-d'Hères, 38402,
Fr.

SO Electrochimica Acta (2003), 48(14-16), 1953-1959

CODEN: ELCAAV; ISSN: 0013-4686

PB Elsevier Science Ltd.

DT Journal

LA English

AB Single-anion conducting polyether networks were synthesized by UV
crosslinking a quaternary ammonium salt with an unsatd. prepolymer. The
conducting networks were prepared with various anions, such as F-, Cl-, Br-,
I-, BF4- and (CF3SO2)2N- by crosslinking appropriate
diallyldimethylammonium salts with 3-chloro-2-chloromethyl-1-propene-
poly(ethylene glycol) using Irgacure 2959 as initiator. The anion conductivity
increased in the halide series with anion size and, more generally, with
decreasing nucleophilicity, due to an increase in charge carriers upon
dissociation. The Arrhenius plots are not linear suggesting, as in
salt-polymer complexes, a VTF [Vogel-Tamman-Fulcher] conductivity mechanism.

The

anion conducting polymer electrolyte films are of interest for use in
electrochem. devices and batteries.

IT 521942-10-9P, Diallyldimethylammonium
trifluoromethanesulfonylimide

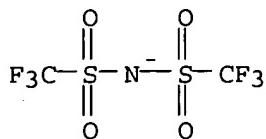
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)

(monomer; preparation of anion-conducting polyelectrolytes by
photo-crosslinking of quaternary ammonium salts with unsatd. polyethers
and temperature dependence of conductivity)

RN 521942-10-9 CAPLUS

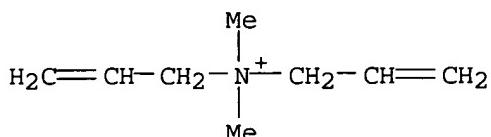
CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, salt with
1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1),
homopolymer (9CI) (CA INDEX NAME)

CRN 98837-98-0
CMF C2 F6 N O4 S2



CM 2

CRN 48042-45-1
CMF C8 H16 N



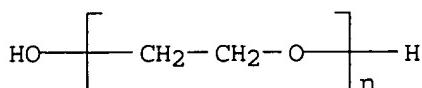
IT 618880-85-6P, 3-Chloro-2-chloromethyl-1-propene-diallyldimethylammonium trifluoromethanesulfonylimide-PEG copolymer
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(preparation of anion-conducting polyelectrolytes by photo-crosslinking of quaternary ammonium salts with unsatd. polyethers and temperature dependence of conductivity)

RN 618880-85-6 CAPLUS

CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1), polymer with 3-chloro-2-(chloromethyl)-1-propene and α -hydro- ω -hydroxypoly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

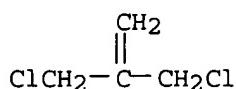
CM 1

CRN 25322-68-3
CMF (C₂ H₄ O)_n H₂ O
CCI PMS



CM 2

CRN 1871-57-4
CMF C₄ H₆ Cl₂

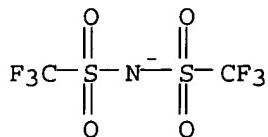


CM 3

CRN 618880-84-5
CMF C8 H16 N . C2 F6 N O4 S2

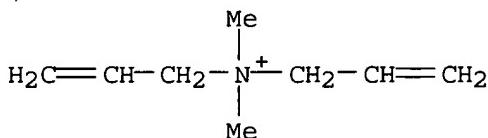
CM 4

CRN 98837-98-0
CMF C2 F6 N O4 S2



CM 5

CRN 48042-45-1
CMF C8 H16 N



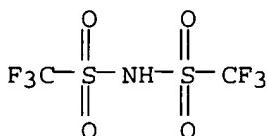
IT 90076-65-6, Lithium triflimide

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of anion-conducting polyelectrolytes by photo-crosslinking of quaternary ammonium salts with unsatd. polyethers and temperature dependence of conductivity)

RN 90076-65-6 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME)



● Li

RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 63 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2003:475976 CAPLUS

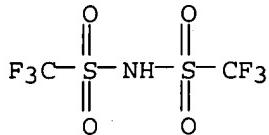
DN 139:338510

TI Thick lamellar textures and high ambient conductivity in de-blended mixtures of low-dimensional systems of two polymers and Li salts

AU Chia, F.; Zheng, Y.; Liu, J.; Reeves, N.; Ungar, G.; Wright, Peter V.

CS Department of Engineering Materials, The University of Sheffield,

SO Sheffield, S1 3JD, UK
 SO Electrochimica Acta (2003), 48(14-16), 1939-1951
 CODEN: ELCAAV; ISSN: 0013-4686
 PB Elsevier Science Ltd.
 DT Journal
 LA English
 AB The three-component low-dimensional polymer electrolyte complexes of blends of the amphiphilic helical polymer poly[2,5,8,11,14-pentaoxapentadecamethylene(5-hexadecyloxy-1,3-phenylene)] (I), poly(tetramethylene oxide)-co-dodecamethylene (II), and LiClO₄, LiBF₄, and Li(CF₃SO₂)₂N were studied by polarized light optical microscopy, DSC and SAXS together with a.c. complex impedance measurements using ITO glass, silver, and lithium electrodes. In systems with LiClO₄, a well-defined spherulitic morphol. with lamellae of 1-3 μm in thickness were observed following heat treatment. The lamellae consist of de-blended polymer I:LiClO₄ complex with polymer II forming an interlamellar ion-conducting layer. Complex impedance measurements with ITO and Ag electrodes indicate conductivity σ .apprx. 10⁻³ S cm⁻¹ with low temperature dependence at ambient to 100° and Z' vs. Z'' planes featuring a new small semicircle on de-blending consistent with a Maxwell series layered dielec. system. A galvanic cell with LiCoO₂ composite cathode discharged at 20° with c.d. of 0.1 mA cm⁻². In corresponding systems with LiBF₄, blocks of lamellae sep. from a blended matrix which give temperature-dependent a.c. conductivity. The d.c. polarization of LiBF₄
 based
 good systems between Li electrodes generated conductivity of 10⁻³-10⁻² S cm⁻¹ in accord with a.c. impedance measurements. Long spacings from SAXS measurements indicate the I-salt occupancy in blends with various salts, which correlates with de-blending.
 IT 90076-65-6, Lithium triflimide
 RL: PRP (Properties)
 mixts. of (lamellar texture and high ambient temperature conductivity of de-blended low-dimensional polyoxyalkylenes and lithium salts)
 RN 90076-65-6 CAPLUS
 CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME)



● Li

RE.CNT 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 64 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2003:435148 CAPLUS
 DN 138:388239
 TI In situ thermal polymerization method for making gel polymer lithium ion rechargeable electrochemical cells
 IN Xing, Weibing; Takeuchi, Esther S.
 PA USA
 SO U.S. Pat. Appl. Publ., 9 pp.
 CODEN: USXXCO

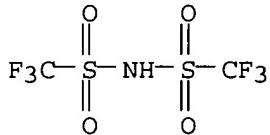
DT Patent
 LA English
 FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---------------|------|----------|----------------------------|----------------------|
| PI | US 2003104282 | A1 | 20030605 | US 2001-883
US 2001-883 | 20011115
20011115 |

AB A single step, in situ curing method for making gel polymer lithium ion rechargeable cells and batteries is disclosed. This method used a precursor solution consisting of monomers with multiple functionalities such as multiple acryloyl functionalities, a free-radical generating activator, nonaq. solvents such as ethylene carbonate and propylene carbonate, and a lithium salt such as LiPF₆. The electrodes are prepared by slurry-coating a carbonaceous material such as graphite onto an anode current collector and a lithium transition metal oxide such as LiCoO₂ onto a cathode current collector, resp. The electrodes, together with a highly porous separator, are then soaked with the polymer electrolyte precursor solution and sealed in a cell package under vacuum. The whole cell package is heated to in situ cure the polymer electrolyte precursor. The resulting lithium ion rechargeable cells with gelled polymer electrolyte demonstrate excellent electrochem. properties such as high efficiency in material utilization, high Coulombic efficiency, good rate capability, and good cyclability.

IT 90076-65-6
 RL: DEV (Device component use); USES (Uses)
 (in-situ thermal polymerization method for making gel polymer lithium ion rechargeable electrochem. cells)

RN 90076-65-6 CAPLUS
 CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME)



● Li

L14 ANSWER 65 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2003:435144 CAPLUS
 DN 138:404399

TI Double current collector cathode for alkali metal ion batteries
 IN Rubino, Robert S.; Gan, Hong; Takeuchi, Esther S.
 PA USA
 SO U.S. Pat. Appl. Publ., 8 pp.
 CODEN: USXXCO

DT Patent
 LA English
 FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---------------|------|----------|--|--------------------------------------|
| PI | US 2003104270 | A1 | 20030605 | US 2002-309856
US 2001-336604P | 20021204
P 20011205 |
| | CA 2413593 | AA | 20030605 | CA 2002-2413593
US 2001-336604P
US 2002-309856 | 20021205
P 20011205
A 20021204 |
| | EP 1318555 | A2 | 20030611 | EP 2002-258396 | 20021205 |
| | EP 1318555 | A3 | 20050817 | | |

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK

US 2001-336604P P 20011205

JP 2003242965 A2 20030829 JP 2002-383051 20021205
US 2001-336604P P 20011205

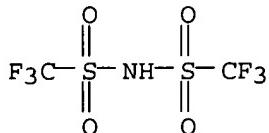
AB A new sandwich pos. electrode design for a secondary cell is provided comprising a "sacrificial" alkali metal along with a cathode active material. In the case of **silver** vanadium oxide, the sacrificial alkali metal is preferably lithium. Upon activating the cells, the lithium metal automatically intercalates into the **silver** vanadium oxide. That way, the sacrificial lithium is consumed and essentially lithiates the **silver** vanadium oxide. This means that cathode active materials, such as **silver** vanadium oxide, which before now were generally only used in primary cells, are now useful in secondary cells. In some use applications, **silver** vanadium oxide is more desirable than typically used lithiated cathode active materials.

IT 90076-65-6

RL: DEV (Device component use); USES (Uses)
(double current collector cathode for alkali metal ion batteries)

RN 90076-65-6 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-,
lithium salt (9CI) (CA INDEX NAME)



● Li

L14 ANSWER 66 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2003:394220 CAPLUS

DN 138:356273

TI Powder process for double current collector screen cathode preparation for lithium batteries

IN Gan, Hong; Takeuchi, Esther S.

PA Wilson Greatbatch Ltd., USA

SO Eur. Pat. Appl., 11 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|--|------|----------|-----------------|------------|
| PI | EP 1313159 | A2 | 20030521 | EP 2001-129988 | 20011217 |
| | EP 1313159 | A3 | 20040421 | | |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | US 2001-992227 | A 20011119 |
| | US 2003096169 | A1 | 20030522 | US 2001-992227 | 20011119 |
| | US 6727022 | B2 | 20040427 | | |
| | CA 2365935 | AA | 20030519 | CA 2001-2365935 | 20011217 |
| | | | | US 2001-992227 | A 20011119 |
| | JP. 2003187789 | A2 | 20030704 | JP 2002-334556 | 20021119 |
| | | | | US 2001-992227 | A 20011119 |

AB The invention comprises an electrode having the configuration: first

active material/current collector screen/second active material. When one of the active materials is in a powder form, it is possible for that material to move through openings in the current collector screen to "contaminate" the interface between the other active material and the current collector. The present invention consists of having the other electrode active materials in a form incapable of moving through the current collector to the other side thereof. Then, the assembly is pressed from the direction of the other electrode active material. This seals off the current collector as the pressing force moves the current collector against the powdered electrode active material.

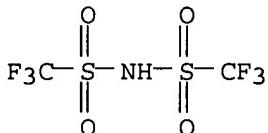
IT 90076-65-6

RL: DEV (Device component use); USES (Uses)

(powder process for double current collector screen cathode preparation for lithium batteries)

RN 90076-65-6 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME)



● Li

L14 ANSWER 67 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2003:356545 CAPLUS

DN 138:376062

TI Document authentication using fluorescent metal organic complex

IN Kathirgamanathan, Poopathy

PA Elam-T Limited, UK

SO PCT Int. Appl., 39 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---------------|--|----------|-----------------|------------|
| PI | WO 2003038010 | A1 | 20030508 | WO 2002-GB4761 | 20021021 |
| | W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW | | | |
| | RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | GB 2001-26065 | A 20011031 |
| EP | 1458835 | A1 | 20040922 | EP 2002-802330 | 20021021 |
| | R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK | | GB 2001-26065 | A 20011031 |
| | | | | WO 2002-GB4761 | W 20021021 |
| JP | 2005507330 | T2 | 20050317 | JP 2003-540277 | 20021021 |
| | | | | GB 2001-26065 | A 20011031 |

| | | | | |
|---------------|----|----------|----------------|------------|
| US 2005019603 | A1 | 20050127 | WO 2002-GB4761 | W 20021021 |
| | | | US 2004-494120 | 20040607 |
| | | | GB 2001-26065 | A 20011031 |
| | | | WO 2002-GB4761 | W 20021021 |

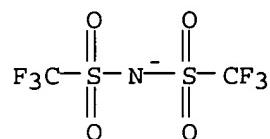
AB Methods of forming an authenticatable or identifiable article are discussed which entail marking the article or incorporating in or on the article a fluorescent metal organic complex. Authenticatable or identifiable articles, items or documents are described in which the article, item or document or a marking on the article, item or document incorporates a fluorescent metal organic complex.

IT 98837-98-0D, metal complex

RL: TEM (Technical or engineered material use); USES (Uses)
(document authentication using fluorescent metal organic complex)

RN 98837-98-0 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, ion(1-) (9CI) (CA INDEX NAME)



RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 68 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2003:348731 CAPLUS
DN 138:324148
TI Method of preparation of mixed phase metal oxide for cathodes of alkali metal batteries
IN Leising, Randolph A.; Takeuchi, Esther S.
PA Wilson Greatbatch, Ltd., USA
SO U.S., 14 pp., Cont.-in-part of U.S. Ser. No. 917,072, abandoned.
CODEN: USXXAM

DT Patent

LA English

FAN.CNT 2

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---------------|------|----------|-----------------|-------------|
| PI | US 6558845 | B1 | 20030506 | US 1999-439872 | 19991112 |
| | | | | US 1997-917072 | B2 19970822 |
| | JP 11144731 | A2 | 19990528 | JP 1998-251950 | 19980820 |
| | | | | US 1997-917072 | A 19970822 |
| | AU 9880877 | A1 | 19990304 | AU 1998-80877 | 19980821 |
| | | | | US 1997-917072 | A 19970822 |
| | US 2002142223 | A1 | 20021003 | US 2001-55687 | 20011026 |
| | US 6696201 | B2 | 20040224 | | |
| | | | | US 1997-917072 | B2 19970822 |
| | | | | US 1999-439872 | A3 19991112 |
| | US 2002078556 | A1 | 20020627 | US 2001-197 | 20011102 |
| | US 6685752 | B2 | 20040203 | | |
| | | | | US 1997-917072 | B2 19970822 |
| | | | | US 1999-439872 | A3 19991112 |

PATENT FAMILY INFORMATION:

FAN 1999:139829

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|------------|------|----------|-----------------|----------|
| PI | EP 898317 | A2 | 19990224 | EP 1998-306235 | 19980804 |
| | EP 898317 | A3 | 19991208 | | |

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,

IE, SI, LT, LV, FI, RO

| | | | | |
|-------------|----|----------|----------------|------------|
| JP 11144731 | A2 | 19990528 | US 1997-917072 | A 19970822 |
| | | | JP 1998-251950 | 19980820 |
| | | | US 1997-917072 | A 19970822 |
| AU 9880877 | A1 | 19990304 | AU 1998-80877 | 19980821 |
| | | | US 1997-917072 | A 19970822 |

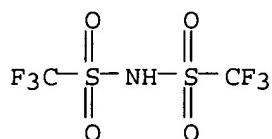
AB The present invention is related to an electrochem. cell comprising an anode of a Group IA metal and a cathode of a mixed phase metal oxide prepared from a combination of starting materials comprising vanadium oxide and a mixture of at least one of a decomposable silver-containing constituent and a decomposable copper-containing constituent. The starting materials are mixed together to form a homogeneous admixt. that is not further mixed once decomposition heating begins to form the product active material. The present cathode material is particularly useful for implantable medical applications.

IT 90076-65-6

RL: DEV (Device component use); USES (Uses)
(method of preparation of mixed phase metal oxide for cathodes of alkali metal batteries)

RN 90076-65-6 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME)



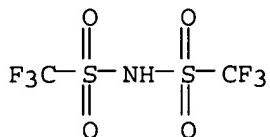
● Li

RE.CNT 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 69 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2003:248560 CAPLUS
DN 139:119818
TI Recent developments in solid state dye sensitized photovoltaic devices based on spiro-MeOTAD
AU Krueger, Jessica; Plass, Robert; Matthieu, Hans J.; Graetzel, Michael
CS Institute of Molecular and Biological Chemistry, Faculty of Basic Science, Swiss Federal Institute of Technology, Lausanne, 1015, Switz.
SO Proceedings of SPIE-The International Society for Optical Engineering (2003), 4801(Organic Photovoltaics III), 56-66
CODEN: PSISDG; ISSN: 0277-786X
PB SPIE-The International Society for Optical Engineering
DT Journal
LA English
AB The photovoltaic performance of solid-state dye-sensitized solar cells based on spiro-MeOTAD (2,2'7,7'-tetrakis(N,N-di-p-methoxyphenyl-amine)-9,9'-spirobi-9H-fluorene) was improved to 3.2% overall conversion efficiency under air mass AM 1.5 illumination by performing the dye adsorption in the presence of silver ions in the dye solution. Different spectroscopic methods, such as x-ray photoelectron, FTIR and UV-visible spectroscopy were employed to scrutinize the impact of the silver on the dye-sensitized device. From spectroscopic evidence it is inferred that the silver binds to the sensitizer mainly via the amphidentate thiocyanate, allowing the formation of ligand-bridged dye complexes. The enhancement in overall device efficiency is a result

of increased open circuit potential and short circuit current. The increased open circuit voltage was explained by the blocking of the dark current as a result of a closer packed dye layer and/or the partial formation of a dye double layer upon silver coordination. The increased short circuit current corresponds to the higher amount of ruthenium dye units adsorbed to the TiO₂ surface.

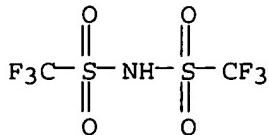
- IT 90076-65-6, Lithium bis(trifluoromethanesulfonyl)imide
RL: DEV (Device component use); PRP (Properties); USES (Uses)
(composite with tert-butylpyridine/ spiro-MeOTAD/and N(PhBrr)3SbCl6;
recent developments in solid state dye sensitized photovoltaic devices
based on spiro-MeOTAD)
- RN 90076-65-6 CAPLUS
- CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-,
lithium salt (9CI) (CA INDEX NAME)



● Li

RE.CNT 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L14 ANSWER 70 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
- AN 2003:22564 CAPLUS
- DN 138:92818
- TI Battery and its manufacture
- IN Takagi, Ryosuke
- PA Sony Corp., Japan
- SO Jpn. Kokai Tokkyo Koho, 12 pp.
CODEN: JKXXAF
- DT Patent
- LA Japanese
- FAN.CNT 1
- | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------|-------|----------|----------------------------------|----------------------|
| ----- | ----- | ----- | ----- | ----- |
| PI JP 2003007335 | A2 | 20030110 | JP 2001-188149
JP 2001-188149 | 20010621
20010621 |
- AB The battery contains Ag at ≤10,000 ppm of the electrolyte solvent mass, and is prepared by dissolving a Ag salt, having counter anion selected from CF₃SO₃⁻, (CF₃SO₂)₂N⁻, (CF₂SO₂)₃C⁻, BF₄⁻, and PF₆⁻, in the solvent.
- IT 90076-65-6
RL: DEV (Device component use); USES (Uses)
(electrolyte solns. with controlled silver fluoro salt content for secondary lithium batteries)
- RN 90076-65-6 CAPLUS
- CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-,
lithium salt (9CI) (CA INDEX NAME)



● Li

L14 ANSWER 71 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2003:5303 CAPLUS

DN 138:26983

TI Anode for nonaqueous secondary batteries

IN Leising, Randolph A.; Takeuchi, Esther S.

PA Wilson Greatbatch Ltd., USA

SO U.S. Pat. Appl. Publ., 12 pp.

CODEN: USXXCO

DT Patent

LA English

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---------------|------|----------|-----------------|----------|
| PI | US 2003003362 | A1 | 20030102 | US 2001-884849 | 20010619 |
| | US 6730437 | B2 | 20040504 | US 2001-884849 | 20010619 |

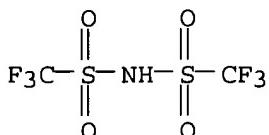
AB The neg. electrode or anode for a secondary electrochem. cell comprising a mixture of graphite or "hairy carbon" and a lithiated metal oxide, a lithiated mixed metal oxide or a lithiated metal sulfide, and preferably a lithiated metal vanadium oxide, is described. A most preferred formulation is graphite mixed with lithiated silver vanadium oxide or lithiated copper silver vanadium oxide.

IT 90076-65-6

RL: DEV (Device component use); USES (Uses)
(anode for nonaq. secondary batteries)

RN 90076-65-6 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME)



● Li

RE.CNT 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 72 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2002:927733 CAPLUS

DN 138:30831

TI Flexible electrochromic structure and methods for the production thereof

IN Hourquebie, Patrick; Topart, Patrice; Pages, Hubert

PA Commissariat a l'Energie Atomique, Fr.

SO PCT Int. Appl., 34 pp.

CODEN: PIXXD2

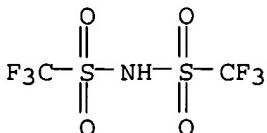
DT Patent
LA French
FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---|------|----------|-----------------|------------|
| PI | WO 2002097519 | A2 | 20021205 | WO 2002-FR1807 | 20020529 |
| | WO 2002097519 | A3 | 20030320 | | |
| | W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| | RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | FR 2001-7144 | A 20010531 |
| | FR 2825481 | A1 | 20021206 | FR 2001-7144 | 20010531 |
| | FR 2825481 | B1 | 20030718 | | |
| | EP 1390803 | A2 | 20040225 | EP 2002-747490 | 20020529 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | FR 2001-7144 | A 20010531 |
| | | | | WO 2002-FR1807 | W 20020529 |
| | JP 2004520632 | T2 | 20040708 | JP 2003-500638 | 20020529 |
| | | | | FR 2001-7144 | A 20010531 |
| | | | | WO 2002-FR1807 | W 20020529 |
| | US 2004012869 | A1 | 20040122 | US 2003-332979 | 20030123 |
| | US 6798554 | B2 | 20040928 | FR 2001-7144 | A 20010531 |
| | | | | WO 2002-FR1807 | W 20020529 |

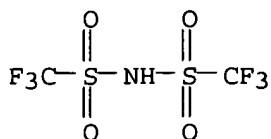
AB The invention relates to a flexible electrochromic structure which operates as a reflector at wavelengths ranging from (0,35) to (20) μm . The inventive structure comprises a microporous membrane including an electrolyte and the following items successively disposed in the following order on each of the surfaces of said microporous membrane in a sym. manner in relation to said membrane: a layer forming a reflecting electrode, an electrochromic conductive polymer layer, and a flexible transparent window at wavelengths ranging from (0,35) and (20) μm .

IT 82113-65-3, Bis((trifluoromethyl)sulfonyl)imide 90076-65-6, Lithium bis((trifluoromethyl)sulfonyl)imide
RL: DEV (Device component use); USES (Uses)
(electrolyte; electrochromic device with)

RN 82113-65-3 CAPLUS
CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]- (9CI)
(CA INDEX NAME)

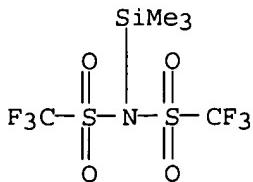


RN 90076-65-6 CAPLUS
CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME)



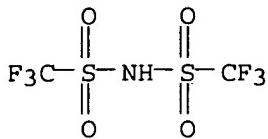
● Li

L14 ANSWER 73 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2002:742329 CAPLUS
 DN 138:254557
 TI Trimethylsilyl bis(trifluoromethanesulfonyl)imide as a tolerant and environmentally benign Lewis acid catalyst of the Diels-Alder reaction
 AU Mathieu, Benoit; Ghosez, Leon
 CS Department of Chemistry, University of Louvain, Louvain-la-Neuve, B-1348, Belg.
 SO Tetrahedron (2002), 58(41), 8219-8226
 CODEN: TETRAB; ISSN: 0040-4020
 PB Elsevier Science Ltd.
 DT Journal
 LA English
 OS CASREACT 138:254557
 AB N-trimethylsilyl bis(trifluoromethanesulfonyl)imide (TMSNTf₂) was readily prepared in situ by protodesilylation of trimethylsilane, allyl- or phenyltrimethylsilane with bis(trifluoromethylsulfonyl)imide. NMR studies showed that TMSNTf₂ was much more effective than TMSOTf in complexing the carbonyl group of trans-methylcrotonate. As a result, TMSNTf₂ was found to be superior to TMSOTf as a catalyst for the Diels-Alder reaction of α,β-unsatd. esters with a wide variety of dienes. In contrast to many metal derived Lewis acids, TMSNTf₂ was found tolerant of many sensitive functional groups present in the diene partner.
 IT 82113-66-4P, N-(Trimethylsilyl)bis(trifluoromethanesulfonyl)imide
 RL: CAT (Catalyst use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
 (preparation of trimethylsilyl bis(trifluoromethanesulfonyl)imide via protodesilylation of silane derivs. and bis(trifluoromethylsulfonyl)imide used as Lewis acid catalyst for stereoselective Diels Alder reactions)
 RN 82113-66-4 CAPLUS
 CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-N-(trimethylsilyl)- (9CI) (CA INDEX NAME)



IT 82113-65-3, Bis(trifluoromethylsulfonyl)imide
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (preparation of trimethylsilyl bis(trifluoromethanesulfonyl)imide via protodesilylation of silane derivs. and bis(trifluoromethylsulfonyl)imide used as Lewis acid catalyst for stereoselective Diels Alder reactions)
 RN 82113-65-3 CAPLUS
 CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]- (9CI)

(CA INDEX NAME)

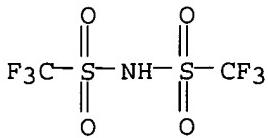


RE.CNT 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 74 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2002:736750 CAPLUS
DN 137:250324
TI Electrochemical cell having an electrode with a phosphonate additive in
the electrode active mixture
IN Gan, Hong; Takeuchi, Esther S.
PA USA
SO U.S. Pat. Appl. Publ., 9 pp.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|----------|
| US 2002136956 | A1 | 20020926 | US 2001-813567 | 20010321 |
| US 6537698 | B2 | 20030325 | US 2001-813567 | 20010321 |

OS MARPAT 137:250324
AB An electrochem. cell of either a primary or a secondary chemical, is
disclosed. In either case, the cell has a neg. electrode of lithium or of
an anode material which is capable of intercalating and de-intercalating
lithium coupled with a pos. electrode of a cathode active material. A
phosphonate compound is mixed with either the anode material or the cathode
active material prior to contact with its current collector. The
resulting electrode couple is activated by a nonaq. electrolyte. The
electrolyte flows into and throughout the electrodes causing the
phosphonate additive to dissolve in the electrolyte. The phosphonate
solute is then able to contact the lithium to provide an elec. insulating
and ionically conducting passivation layer thereon.
IT 90076-65-6
RL: DEV (Device component use); USES (Uses)
(electrochem. cell having electrode with phosphonate additive in
electrode active mixture)
RN 90076-65-6 CAPLUS
CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-,
lithium salt (9CI) (CA INDEX NAME)

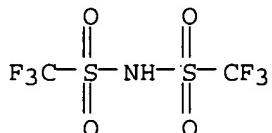


● Li

L14 ANSWER 75 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2002:736748 CAPLUS
 DN 137:250323
 TI Electrochemical cell having an electrode with a nitrate additive in the electrode active mixture
 IN Gan, Hong; Takeuchi, Esther S.
 PA USA
 SO U.S. Pat. Appl. Publ., 8 pp.
 CODEN: USXXCO
 DT Patent
 LA English
 FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------|------|----------|-----------------|----------|
| ----- | ---- | ----- | ----- | ----- |
| PI US 2002136950 | A1 | 20020926 | US 2001-813569 | 20010321 |
| US 6562515 | B2 | 20030513 | | |
| | | | US 2001-813569 | 20010321 |

OS MARPAT 137:250323
 AB An electrochem. cell of either a primary or a secondary chemical, is disclosed. In either case, the cell has a neg. electrode of lithium or of an anode material which is capable of intercalating and de-intercalating lithium coupled with a pos. electrode of a cathode active material. A nitrate compound is mixed with either the anode material or the cathode active material prior to contact with its current collector. The resulting electrode couple is activated by a nonaq. electrolyte. The electrolyte flows into and throughout the electrodes causing the nitrate additive to dissolve in the electrolyte. The nitrate solute is then able to contact the lithium to provide an elec. insulating and ionically conducting passivation layer thereon.
 IT 90076-65-6
 RL: DEV (Device component use); USES (Uses)
 (electrochem. cell having electrode with nitrate additive in electrode active mixture)
 RN 90076-65-6 CAPLUS
 CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME)



● Li

L14 ANSWER 76 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2002:716677 CAPLUS
 DN 137:235267
 TI Secondary light metal battery
 IN Fujita, Shigeru; Akashi, Hiroyuki; Adachi, Momoe; Shibamoto, Gorou
 PA Sony Corporation, Japan
 SO PCT Int. Appl., 42 pp.
 CODEN: PIXXD2
 DT Patent
 LA Japanese
 FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|------|-------|-----------------|-------|
| ----- | ---- | ----- | ----- | ----- |

PI WO 2002073731

A1 20020919

WO 2002-JP2409

20020314

W: US

RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
PT, SE, TR

JP 2002270231

A2 20020920

JP 2001-73058

A 20010314

EP 1369951

A1 20031210

JP 2001-73058

20010314

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, FI, CY, TR

EP 2002-705176

20020314

US 2004096736

A1 20040520

JP 2001-73058

A 20010314

WO 2002-JP2409

W 20020314

US 2003-471988

20030912

JP 2001-73058

A 20010314

WO 2002-JP2409

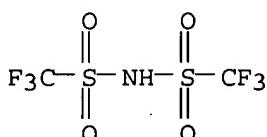
W 20020314

AB The battery has an anode, whose capacity is the sum of the intercalation and deposition capacities of a light metal M of the anode active mass, and an electrolyte containing ≥ 1 of $(CmF2m+1SO2)(CnF2n+1SO2)NM$ (m and n are integers ≥ 1) and ≥ 1 other M salts. The anion of other M salt is selected from $PF6^-$, $AsF6^-$, $BF4^-$, and $ClO4^-$; and the anode contains carbonaceous materials and/or metal, semiconductor, and alloy capable of alloying with M. M is preferably Li.

IT 90076-65-6 132843-44-8

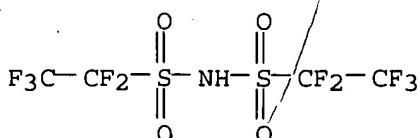
RL: DEV (Device component/use); USES (Uses)
(compns. of Li perfluoroalkylsulfonimide salt based electrolyte mixts.
for secondary lithium batteries)

RN 90076-65-6 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-,
lithium salt (9CI) (CA INDEX NAME)

● Li

RN 132843-44-8 CAPLUS

CN Ethanesulfonamide, 1,1,2,2,2-pentafluoro-N-[(pentafluoroethyl)sulfonyl]-,
lithium salt (9CI) (CA INDEX NAME)

● Li

RE.CNT 9

THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 77 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2002:714442 CAPLUS

DN 137:250268

TI Secondary light metal battery
IN Akashi, Hiroyuki
PA Sony Corp., Japan
SO Jpn. Kokai Tokkyo Koho, 17 pp.
CODEN: JKXXAF

DT Patent
LA Japanese
FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---------------|------|----------|-----------------|----------|
| PI | JP 2002270233 | A2 | 20020920 | JP 2001-73186 | 20010314 |
| | | | | JP 2001-73186 | 20010314 |

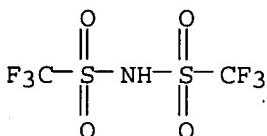
OS MARPAT 137:250268
AB The battery has a light metal intercalating and depositing anode and an electrolyte solution containing a vinylene compound I, where X, Y, and Z are ≥ 1 Group VIA elements. The light metal is preferably Li, and the anode is a carbonaceous material or a metal, semiconductor, or alloy capable of alloying with the light metal.

IT 90076-65-6 132843-44-8

RL: DEV (Device component use); USES (Uses)
(electrolyte solns. containing vinylene derivs. for secondary lithium batteries with intercalating and deposition anodes)

RN 90076-65-6 CAPLUS

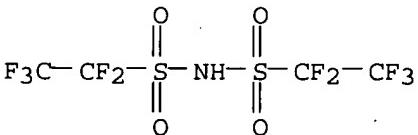
CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME)



● Li

RN 132843-44-8 CAPLUS

CN Ethanesulfonamide, 1,1,2,2,2-pentafluoro-N-[(pentafluoroethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME)



● Li

L14 ANSWER 78 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2002:658319 CAPLUS

DN 137:176304

TI Electrorefining process for separating metals

IN Bradley, Antonia; Cogan, Christopher John; Hanson, Bruce Christopher; Lewin, Robert Glynn; Ogden, Mark D.; Owens, Scott Lee; Pitner, William Robert; Rooney, David William; Sanders, David; Smart, Neil Graham; Taylor, Richard Jonathan; Thied, Robert Charles

PA British Nuclear Fuels PLC, UK
 SO PCT Int. Appl., 26 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---|------|----------|-----------------|------------|
| PI | WO 2002066712 | A1 | 20020829 | WO 2002-GB729 | 20020221 |
| | W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| | RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | GB 2001-4253 | A 20010221 |
| EP | 1366218 | A1 | 20031203 | EP 2002-701413 | 20020221 |
| EP | 1366218 | B1 | 20041006 | | |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | GB 2001-4253 | A 20010221 |
| | | | | WO 2002-GB729 | W 20020221 |
| CN | 1492951 | A | 20040428 | CN 2002-805301 | 20020221 |
| | | | | GB 2001-4253 | A 20010221 |
| JP | 2004530042 | T2 | 20040930 | JP 2002-566010 | 20020221 |
| | | | | GB 2001-4253 | A 20010221 |
| | | | | WO 2002-GB729 | W 20020221 |

AB The invention comprises an electrorefining process for separating a metal from a composition including the said metal, the method comprising forming an electrorefining cell having an anode, a cathode and an electrolyte, wherein the anode comprises the metal and the electrolyte comprises a substance which is liquid at its operating temperature and at this temperature

is comprises wholly or largely of ionic species, and applying a sufficient p.d. between the anode and the cathode to cause the metal to transfer from the anode to the cathode and to be deposited thereon, wherein gap between the anode and the cathode is minimised, the electrolyte is circulated at high velocity through the cell, and the available surface area of the cathode is maximised by providing the metal in a form which has a large surface area per unit volume In preferred embodiments, either the anode is in the form of a basket, and the metal composition is provided in a finely divided form within the said basket or the metal composition is provided in the form of a long, thin rod which itself forms the anode. Preferably, the composition including the metal comprises spent nuclear fuel, and the electrolyte comprises an ionic liquid

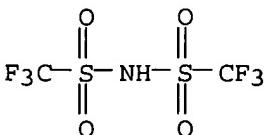
IT 82113-65-3, Bis(trifluoromethanesulfonyl)imide

RL: NUU (Other use, unclassified); USES (Uses)

(electrorefining process for separating metals from spent nuclear fuel in ionic liquid containing anion)

RN 82113-65-3 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]- (9CI)
 (CA INDEX NAME)



RE.CNT 4

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 79 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2002:634382 CAPLUS
 DN 137:172414
 TI Apparatus for releasing gases from rechargeable lithium batteries during the formation stage of manufacturing
 IN Hallifax, Paul; Urso, Tina L.; Spillman, David M.; Meyer, Bruce
 PA Wilson Greatbatch Ltd., USA
 SO Eur. Pat. Appl., 12 pp.
 CODEN: EPXXDW

DT Patent
 LA English

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|--|------|----------|-----------------|------------|
| PI | EP 1233463 | A2 | 20020821 | EP 2001-124539 | 20011012 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | US 2001-788240 | A 20010216 |
| | US 2002114991 | A1 | 20020822 | US 2001-788240 | 20010216 |
| | US 6586131 | B2 | 20030701 | | |
| | CA 2358238 | AA | 20020816 | CA 2001-2358238 | 20011004 |
| | | | | US 2001-788240 | A 20010216 |
| | JP 2002289162 | A2 | 20021004 | JP 2002-20993 | 20020130 |
| | | | | US 2001-788240 | A 20010216 |

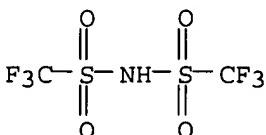
AB An alkali metal secondary electrochem. cell, and preferably a lithium ion cell, provided with a removable gas relief valve, is described. The gas release valve is positioned on the casing, in fluid flow communication between the inside thereof and the exterior. This gas release valve serves to eliminate cell gases that build up inside the casing during the cell's formation stage. Once the lithium-ion cell has completed formation, the gas release valve is removed and replaced with a hermetic closure. Removal of the gas release valve and sealing of the cell takes place in an environment in which no outside gas is capable of being introduced inside the casing. The cell can also be provided in a tank filled with inert gas and a filter which separates the cell gas from the inert gas. When cell formation is completed, the cell is hermetically sealed.

IT 90076-65-6

RL: DEV (Device component use); USES (Uses)
 (apparatus for releasing gases from rechargeable lithium batteries during formation stage of manufacturing)

RN 90076-65-6 CAPLUS

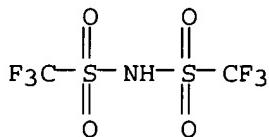
CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME)



● Li

L14 ANSWER 80 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2002:560659 CAPLUS

DN 137:391850
 TI Poly(3,4-alkylenedioxythiophene)-Based Supercapacitors Using Ionic Liquids
 as Supporting Electrolytes
 AU Stenger-Smith, John D.; Webber, Cynthia K.; Anderson, Nicole; Chafin,
 Andrew P.; Zong, Kyukwan; Reynolds, John R.
 CS Research Department, Chemistry Division, Naval Air Warfare Center/Weapons
 Division, China Lake, CA, 93555, USA
 SO Journal of the Electrochemical Society (2002), 149(8), A973-A977
 CODEN: JESOAN; ISSN: 0013-4651
 PB Electrochemical Society
 DT Journal
 LA English
 AB A series of dual conducting polymer based type I supercapacitors were
 constructed using poly(3,4-propylenedioxythiophene) and
 poly(3,4-ethylenedioxythiophene) as electrode couples. The switching
 speeds and cycle lifetimes of these supercapacitors were compared using
 two types of supporting electrolytes; lithium
 bis(trifluoromethanesulfonyl)imide and 1-ethyl-3-methyl-1-H-imidazolium
 bis(trifluoromethanesulfonyl)imide (a room temperature molten salt). The
 results indicate that supercapacitors using 1-ethyl-3-methyl-1-H-
 imidazolium bis(trifluoromethanesulfonyl)imide as the supporting
 electrolyte have cycle lifetimes superior to supercapacitors using lithium
 bis(trifluoromethanesulfonyl)imide as the supporting electrolyte.
 IT 90076-65-6, Lithium bis(trifluoromethanesulfonyl)imide
 RL: DEV (Device component use); USES (Uses)
 (electrolyte; polyalkylenedioxythiophene-based supercapacitors using
 ionic liqs. as supporting electrolytes)
 RN 90076-65-6 CAPLUS
 CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-,
 lithium salt (9CI) (CA INDEX NAME)

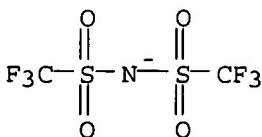


● Li

IT 174899-82-2P
 RL: DEV (Device component use); SPN (Synthetic preparation); PREP
 (Preparation); USES (Uses)
 (electrolyte; polyalkylenedioxythiophene-based supercapacitors using
 ionic liqs. as supporting electrolytes)
 RN 174899-82-2 CAPLUS
 CN 1H-Imidazolium, 1-ethyl-3-methyl-, salt with 1,1,1-trifluoro-N-
 [(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

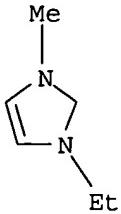
CM 1

CRN 98837-98-0
CMF C2 F6 N O4 S2



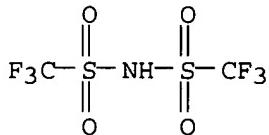
CM 2

CRN 65039-03-4
CMF C6 H11 N2



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

IT 82113-65-3, Bis(trifluoromethanesulfonyl)imide
RL: RCT (Reactant); RACT (Reactant or reagent)
(polyalkylenedioxythiophene-based supercapacitors using ionic liqs. as
supporting electrolytes)
RN 82113-65-3 CAPLUS
CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]- (9CI)
(CA INDEX NAME)



RE.CNT 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 81 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2002:553509 CAPLUS
DN 137:127526
TI Electrolyte composition with high ion conductivity and high ion transport
number and nonaqueous electrolyte secondary batteries
IN Wariishi, Koji; Sen, Masakazu; Ono, Michio
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 24 pp.
CODEN: JKXXAF

DT Patent
LA Japanese

FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------|------|----------|----------------------------------|------------------------|
| ----- | ---- | ----- | ----- | ----- |
| PI JP 2002208433 | A2 | 20020726 | JP 2001-325587
JP 2000-323202 | 20011023
A 20001023 |

OS MARPAT 137:127526
AB The compns. contain (A) ≥1 compds. selected from I,
R21L21A+(L22R22)(L23R23)(L24R24) X- and R31L31N+(L32R32):C[N(L33R33)(L34R3
4)][N(L35R35)(L36R36)] X- (Q = group for forming 5- or 6-membered aromatic
cation; L11-12, L21-24, L31-36 = (un)substituted alkylene(oxy) and/or
alkenylene(oxy); R11-12, R21-24, R31-36 = H, OM(OR)n, may form ring;
≥1 of R11-12, R21-24, R31-36 = OM(OR)n; R = (un)substituted alkyl
or aryl; M = Si, B, Ti, Al, Ge, Sn; n1 = 0, natural number; X- = anion) and
(B) salts of Group IA or IIA ions. Preferable Markush structures for I
are further specified. Also claimed are solid electrolyte compns. containing

crosslinked compds. of component A, obtained by reaction of A with compds. having ≥ 2 nucleophilic groups in a mol., instead of component A. Nonaq. electrolyte secondary batteries with the said electrolyte compns. are also claimed. Batteries with high capacity and excellent cycle characteristics are obtained.

IT 444045-88-9P 444046-10-0DP, lithium complex
 444046-11-1DP, lithium complex 444046-12-2DP, lithium complex 444046-14-4DP, lithium complex 444046-16-6DP, lithium complex 444046-17-7DP, lithium complex 444046-19-9DP, lithium complex 444046-20-2DP, lithium complex 444046-21-3DP, lithium complex
 RL: DEV (Device component use); IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (ammonium compound-Li salt mixts. or their crosslinked solids as electrolytes for nonaq. secondary batteries)

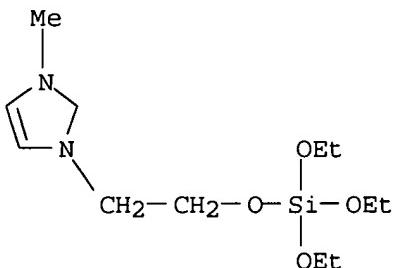
RN 444045-88-9 CAPLUS

CN 1H-Imidazolium, 1-methyl-3-[2-[(triethoxysilyl)oxy]ethyl]-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 444045-87-8

CMF C12 H25 N2 O4 Si

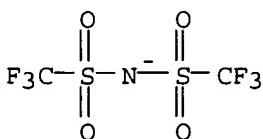


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 98837-98-0

CMF C2 F6 N O4 S2



RN 444046-10-0 CAPLUS

CN 1H-Imidazolium, 1-methyl-3-[2-[(triethoxysilyl)oxy]ethyl]-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1), polymer with 2,2'-(oxybis(2,1-ethanediyl))bis[ethanol] (9CI) (CA INDEX NAME)

CM 1

CRN 112-60-7

CMF C8 H18 O5

HO—CH₂—CH₂—O—CH₂—CH₂—O—CH₂—CH₂—O—CH₂—CH₂—OH

CM 2

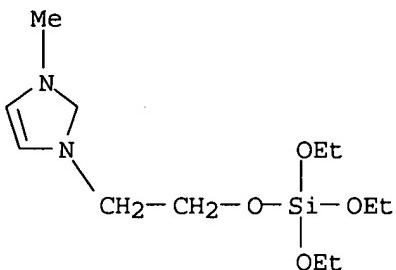
CRN 444045-88-9

CMF C12 H25 N2 O4 Si . C2 F6 N O4 S2

CM 3

CRN 444045-87-8

CMF C12 H25 N2 O4 Si

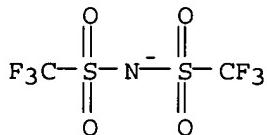


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 4

CRN 98837-98-0

CMF C2 F6 N O4 S2



RN 444046-11-1 CAPLUS

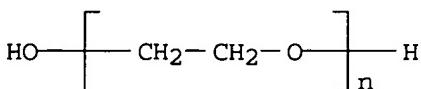
CN 1H-Imidazolium, 1-methyl-3-[2-[(triethoxysilyl)oxy]ethyl]-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1), polymer with α -hydro- ω -hydroxypoly(oxy-1,2-ethanediyl) (9CI)
(CA INDEX NAME)

CM 1

CRN 25322-68-3

CMF (C₂ H₄ O)_n H₂ O

CCI PMS

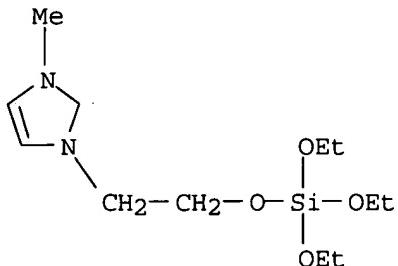


CM 2

CRN 444045-88-9
CMF C12 H25 N2 O4 Si . C2 F6 N O4 S2

CM 3

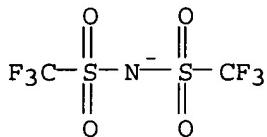
CRN 444045-87-8
CMF C12 H25 N2 O4 Si



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 4

CRN 98837-98-0
CMF C2 F6 N O4 S2

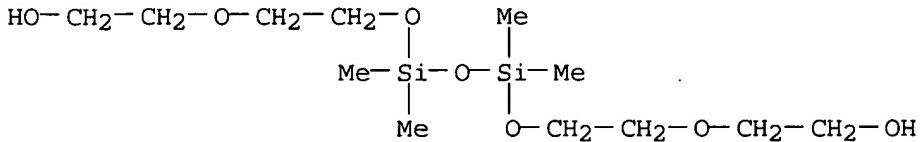


RN 444046-12-2 CAPLUS

CN 1H-Imidazolium, 1-methyl-3-[2-[(triethoxysilyl)oxy]ethyl]-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1), polymer with 7,7,9,9-tetramethyl-3,6,8,10,13-pentaoxa-7,9-disilapentadecane-1,15-diol (9CI) (CA INDEX NAME)

CM 1

CRN 61854-15-7
CMF C12 H30 O7 Si2



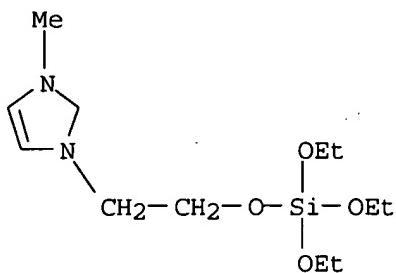
CM 2

CRN 444045-88-9
CMF C12 H25 N2 O4 Si . C2 F6 N O4 S2

CM 3

CRN 444045-87-8

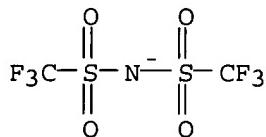
CMF C12 H25 N2 O4 Si



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 4

CRN 98837-98-0
CMF C2 F6 N O4 S2



RN 444046-14-4 CAPLUS

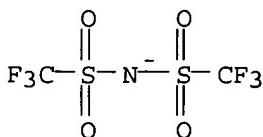
CN 1H-Imidazolium, 1-methyl-3-[2-[(triethoxysilyl)oxy]ethyl]-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1), polymer with 2-hydroxy-N-(2-hydroxyethyl)-N,N-dimethylethanaminium salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 444046-13-3
CMF C6 H16 N O2 . C2 F6 N O4 S2

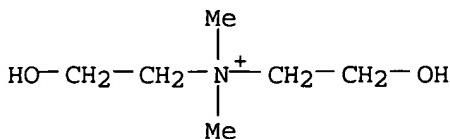
CM 2

CRN 98837-98-0
CMF C2 F6 N O4 S2



CM 3

CRN 44798-79-0
CMF C6 H16 N O2 .



CM 4

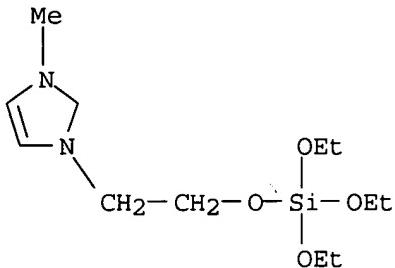
CRN 444045-88-9

CMF C12 H25 N2 O4 Si . C2 F6 N O4 S2

CM 5

CRN 444045-87-8

CMF C12 H25 N2 O4 Si

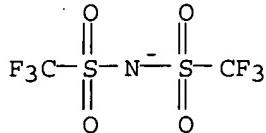


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 6

CRN 98837-98-0

CMF C2 F6 N O4 S2



RN 444046-16-6 CAPLUS

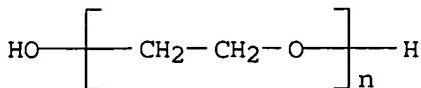
CN 1H-Imidazolium, 1,3-bis[2-[(triethoxysilyl)oxy]ethyl]-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1), polymer with α -hydro- ω -hydroxypoly(oxy-1,2-ethanediyl) (9CI)
(CA INDEX NAME)

CM 1

CRN 25322-68-3

CMF (C₂ H₄ O)_n H₂ O

CCI PMS

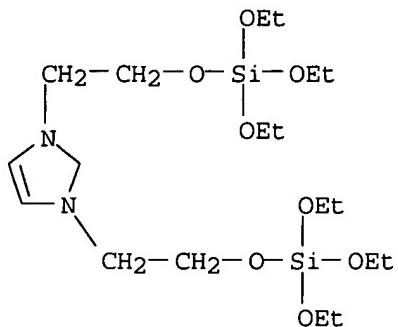


CM 2

CRN 444045-97-0
CMF C19 H41 N2 O8 Si2 . C2 F6 N O4 S2

CM 3

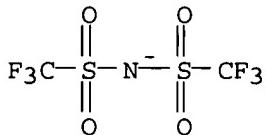
CRN 444045-94-7
CMF C19 H41 N2 O8 Si2



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 4

CRN 98837-98-0
CMF C2 F6 N O4 S2

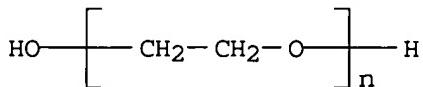


RN 444046-17-7 CAPLUS

CN Pyridinium, 1,4-bis[2-[(triethoxysilyl)oxy]ethyl]-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1), polymer with α -hydro- ω -hydroxypoly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

CM 1

CRN 25322-68-3
CMF (C₂ H₄ O)_n H₂ O
CCI PMS

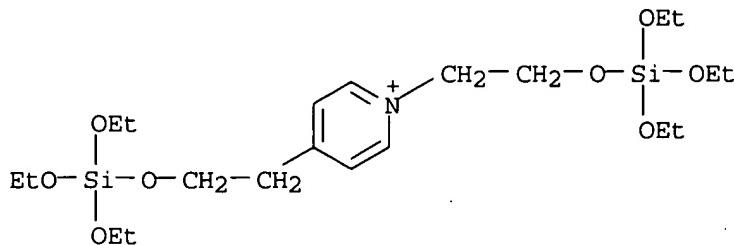


CM 2

CRN 444046-03-1
CMF C21 H42 N O8 Si2 . C2 F6 N O4 S2

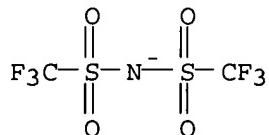
CM 3

CRN 444045-92-5
CMF C21 H42 N O8 Si2



CM 4

CRN 98837-98-0
CMF C2 F6 N O4 S2

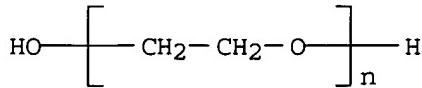


RN 444046-19-9 CAPLUS

CN Ethanaminium, N,N-dimethyl-2-[(trimethoxysilyl)oxy]-N-[2-[(trimethoxysilyl)oxy]ethyl]-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1), polymer with α -hydro- ω -hydroxypoly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

CM 1

CRN 25322-68-3
CMF (C2 H4 O)n H2 O
CCI PMS

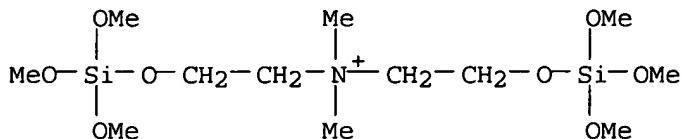


CM 2

CRN 444046-09-7
CMF C12 H32 N O8 Si2 . C2 F6 N O4 S2

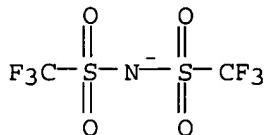
CM 3

CRN 444046-08-6
CMF C12 H32 N O8 Si2



CM 4

CRN 98837-98-0
CMF C2 F6 N O4 S2

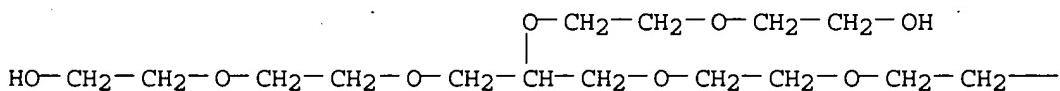


RN 444046-20-2 CAPLUS
CN Ethanaminium, N,N-dimethyl-2-[(trimethoxysilyl)oxy]-N-[2-((trimethoxysilyl)oxy)ethyl]-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1), polymer with 8-[2-(2-hydroxyethoxy)ethoxy]-3,6,10,13-tetraoxapentadecane-1,15-diol (9CI) (CA INDEX NAME)

CM 1

CRN 133988-72-4
CMF C15 H32 O9

PAGE 1-A



PAGE 1-B

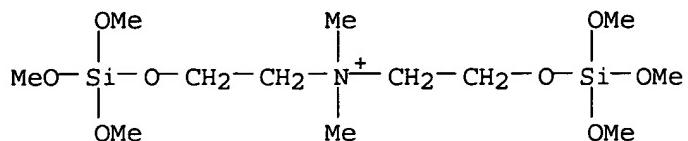
—OH

CM 2

CRN 444046-09-7
CMF C12 H32 N O8 Si2 . C2 F6 N O4 S2

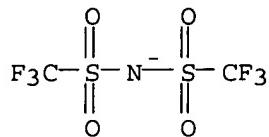
CM 3

CRN 444046-08-6
CMF C12 H32 N O8 Si2



CM 4

CRN 98837-98-0
 CMF C2 F6 N O4 S2



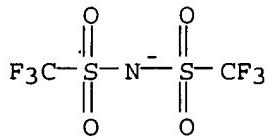
RN 444046-21-3 CAPLUS
 CN Ethanaminium, N,N-dimethyl-2-[(trimethoxysilyl)oxy]-N-[2-[(trimethoxysilyl)oxy]ethyl]-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1), polymer with 2-hydroxy-N-(2-hydroxyethyl)-N,N-dimethylethanaminium salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 444046-13-3
 CMF C6 H16 N O2 . C2 F6 N O4 S2

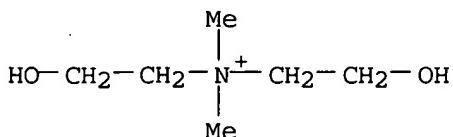
CM 2

CRN 98837-98-0
 CMF C2 F6 N O4 S2



CM 3

CRN 44798-79-0
 CMF C6 H16 N O2

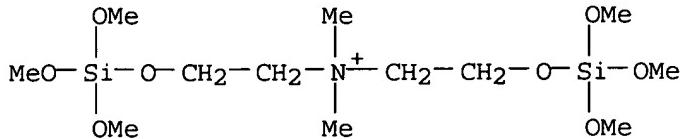


CM 4

CRN 444046-09-7
CMF C12 H32 N O8 Si2 . C2 F6 N O4 S2

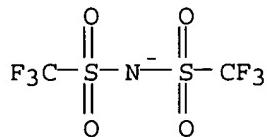
CM 5

CRN 444046-08-6
CMF C12 H32 N O8 Si2



CM 6

CRN 98837-98-0
CMF C2 F6 N O4 S2

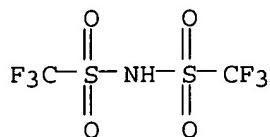


IT 90076-65-6

RL: DEV (Device component use); RCT (Reactant); TEM (Technical or engineered material use); RACT (Reactant or reagent); USES (Uses)
(ammonium compound-Li salt mixts. or their crosslinked solids as electrolytes for nonaq. secondary batteries)

RN 90076-65-6 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME)



● Li

IT 444045-97-0 444046-01-9 444046-03-1

444046-07-5 444046-09-7

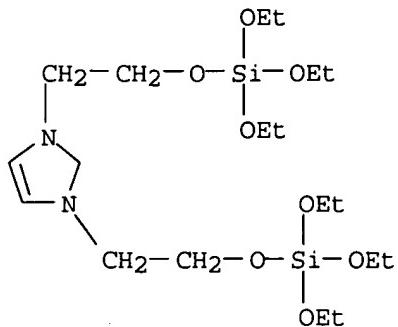
RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)
(ammonium compound-Li salt mixts. or their crosslinked solids as electrolytes for nonaq. secondary batteries)

RN 444045-97-0 CAPLUS

CN 1H-Imidazolium, 1,3-bis[2-[(triethoxysilyl)oxy]ethyl]-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

CM 1

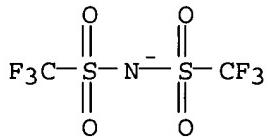
CRN 444045-94-7
CMF C19 H41 N2 O8 Si2



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 98837-98-0
CMF C2 F6 N O4 S2

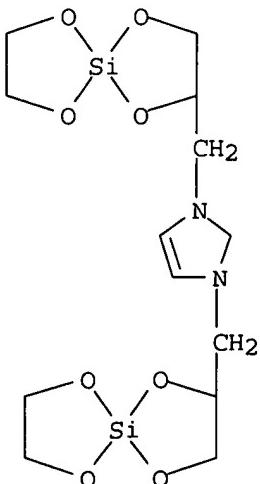


RN 444046-01-9 CAPLUS

CN 1H-Imidazolium, 1,3-bis(1,4,6,9-tetraoxa-5-silaspiro[4.4]non-2-ylmethyl)-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

CM 1

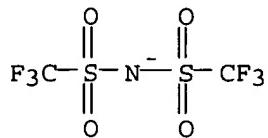
CRN 444046-00-8
CMF C13 H21 N2 O8 Si2



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 98837-98-0
CMF C2 F6 N O4 S2

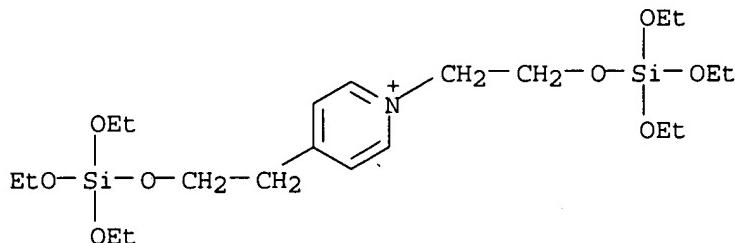


RN 444046-03-1 CAPLUS

CN Pyridinium, 1,4-bis[2-[(triethoxysilyl)oxy]ethyl]-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

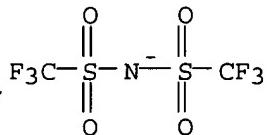
CM 1

CRN 444045-92-5
CMF C21 H42 N O8 Si2



CM 2

CRN 98837-98-0
CMF C2 F6 N O4 S2

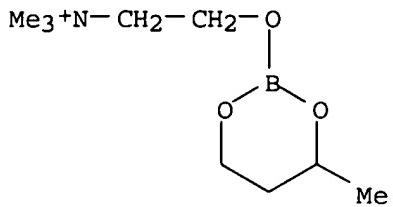


RN 444046-07-5 CAPLUS

CN Ethanaminium, N,N,N-trimethyl-2-[(4-methyl-1,3,2-dioxaborinan-2-yl)oxy]-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

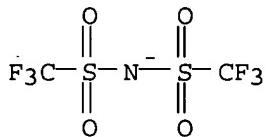
CM 1

CRN 444046-06-4
CMF C9 H21 B N O3



CM 2

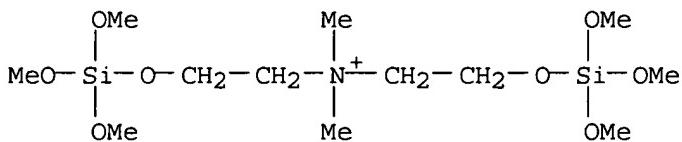
CRN 98837-98-0
CMF C2 F6 N O4 S2



RN 444046-09-7 CAPLUS
CN Ethanaminium, N,N-dimethyl-2-[(trimethoxysilyl)oxy]-N-[2-[(trimethoxysilyl)oxy]ethyl]-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

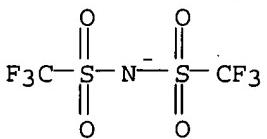
CM 1

CRN 444046-08-6
CMF C12 H32 N O8 Si2



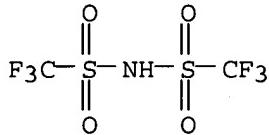
CM 2

CRN 98837-98-0
CMF C2 F6 N O4 S2



L14 ANSWER 82 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2002:549461 CAPLUS
DN 137:355366
TI Recent developments in sensitized mesoporous heterojunction solar cells
AU Kruger, Jessica; Bach, Udo; Plass, Robert; Piccerelli, Marco; Cevey, Le;
Gratzel, Michael
CS Laboratoire de photonique et interfaces, Institute de chimie physique,

SO Ecole Polytechnique Federale de Lausanne, Switz.
 Materials Research Society Symposium Proceedings (2002), 708(Organic
 Optoelectronic Materials, Processing and Devices), 259-269
 CODEN: MRSPDH; ISSN: 0272-9172
 PB Materials Research Society
 DT Journal
 LA English
 AB The performance of solid-state dye-sensitized solar cells based on spiro-MeOTAD (2,2'7,7'-tetrakis(N,N-di-p-methoxyphenyl-amine)-9,9'-spirobifluorene) was considerably improved by decreasing charge recombination across the interface of the heterojunction. This was achieved by blending the hole conductor matrix with a combination of 4-tert-butylpyridine (tBP) and Li[CF₃SO₂]₂N. Open-circuit voltages (U_{oc}) over 900 mV and short circuit currents (I_{sc}) up to 5.1 mA were obtained, yielding an overall efficiency of 2.56% at AM1.5 illumination. Further improvement of device performance was observed when conducting stripes of Ag were deposited onto the devices as charge collector. The beneficial effect however could be assigned to the contamination of the dye-sensitized TiO₂ film with Ag during the dyeing process.
 IT 90076-65-6
 RL: DEV (Device component use); MOA (Modifier or additive use); USES (Uses)
 (development of dye-sensitized mesoporous heterojunction solar cells with)
 RN 90076-65-6 CAPLUS
 CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME)



● Li

RE.CNT 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 83 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2002:540172 CAPLUS
 DN 137:111688
 TI Electrochemical cell having an electrode with a nitrite additive in the electrode active mixture
 IN Gan, Hong; Takeuchi, Esther S.
 PA USA
 SO U.S. Pat. Appl. Publ., 8 pp.
 CODEN: USXXCO
 DT Patent
 LA English
 FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------|------|----------|-----------------|----------|
| ----- | ---- | ----- | ----- | ----- |
| PI US 2002094480 | A1 | 20020718 | US 2001-765266 | 20010118 |
| US 6528207 | B2 | 20030304 | | |
| | | | US 2001-765266 | 20010118 |

OS MARPAT 137:111688
 AB Electrode-active materials for primary or secondary lithium batteries are fabricated in a method that includes mixing the active electrode material

with a nitrite ester prior to contact of the active material with its current collector. The resulting electrode couple is activated by a non-aqueous electrolyte (especially containing Li salts) which dissolves the nitrite

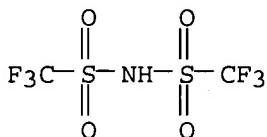
ester. The unsatd. nitrite ester has the general structure $(RO)N(:O)$, in which R is C1-10-saturated hydrocarbyl or heteroatom group, or C2-10-unsatd. hydrocarbyl or heteroatom group. Suitable nitrite esters include Me nitrite, Et nitrite, Pr nitrite, iso-Pr nitrite, Bu nitrite, tert-Bu nitrite, iso-Bu nitrite, benzyl nitrite, and Ph nitrite. The nitrite ester is present in the anode and cathode active materials at a 0.05-5.0 weight% level.

IT 90076-65-6, Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt

RL: DEV (Device component use); USES (Uses)
(nonaq. battery electrolytes containing; electrode-active materials for primary or secondary lithium batteries containing unsatd. nitrite ester additives)

RN 90076-65-6 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME)



● Li

L14 ANSWER 84 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2002:540171 CAPLUS

DN 137:111687

TI Electrode-active materials for primary or secondary lithium batteries containing unsaturated phosphate ester additives

IN Gan, Hong; Takeuchi, Esther S.

PA USA

SO U.S. Pat. Appl. Publ., 8 pp.

CODEN: USXXCO

DT Patent

LA English

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---------------|------|----------|-----------------|----------|
| PI | US 2002094479 | A1 | 20020718 | US 2001-761626 | 20010117 |
| | US 6511772 | B2 | 20030128 | | |
| | | | | US 2001-761626 | 20010117 |

OS MARPAT 137:111687

AB Electrode-active materials for primary or secondary lithium batteries are fabricated in a method that includes mixing the active electrode material with an unsatd. phosphate ester prior to contact of the active material with its current collector. The resulting electrode couple is activated by a non-aqueous electrolyte (especially containing Li salts) which dissolves the

phosphate ester. The unsatd. phosphate ester has the general structure $(R_1)P(:O)(OR_2)(OR_3)$, in which at least one of the R groups is H (but not all 3) and at least one of the R groups is a $C\geq 3$ -unsatd. group.

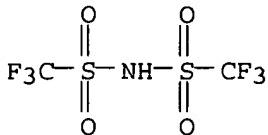
Suitable phosphate esters include monobenzyl phosphate, benzyl phosphate, benzyl di-Me phosphate, allyl di-Me phosphate, cyanomethyl di-Me

phosphate, etc.

IT 90076-65-6, Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt
 RL: DEV (Device component use); USES (Uses)
 (nonaq. battery electrolytes containing; electrode-active materials for primary or secondary lithium batteries containing unsatd. phosphate ester additives)

RN 90076-65-6 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME)



● Li

L14 ANSWER 85 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2002:522255 CAPLUS
 DN 137:96277

TI Synthesis and uses of polyethyleneimine- and polypropyleneimine-based conducting polymer electrolytes, especially for batteries and fuel cells
 IN Frech, Roger E.; Glatzhofer, Daniel T.
 PA The University of Oklahoma, USA
 SO PCT Int. Appl., 89 pp.

CODEN: PIXXD2

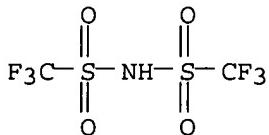
DT Patent

LA English

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|---|----------|----------|-----------------|------------|
| PI | WO 2002054515 | A2 | 20020711 | WO 2001-US50140 | 20011231 |
| | WO 2002054515 | A3 | 20031231 | | |
| | W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW | | | | |
| | RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| CA 2433670 | AA | 20020711 | | US 2000-258754P | P 20001229 |
| | | | | CA 2001-2433670 | 20011231 |
| | | | | US 2000-258754P | P 20001229 |
| | | | | WO 2001-US50140 | W 20011231 |
| US 2002160271 | A1 | 20021031 | | US 2001-38782 | 20011231 |
| | | | | US 2000-258754P | P 20001229 |
| EP 1393394 | A2 | 20040303 | | EP 2001-994419 | 20011231 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | |
| | | | | US 2000-258754P | P 20001229 |
| | | | | WO 2001-US50140 | W 20011231 |
| JP 2004525204 | T2 | 20040819 | | JP 2002-554902 | 20011231 |
| | | | | US 2000-258754P | P 20001229 |

- AB A covalently cross-linked polymer electrolyte, present as a continuous thin film (preferably 100-1000 μ thick) with preferred specific conductivity of $\geq 10^{-3}$ S/cm at 20-100°, has amine groups in the polymer backbone and contains dispersed metal salts (e.g., salts with alkali metals, alkaline earth metals, and transition metals). The polymers are preferably selected from substituted or unsubstituted poly(ethyleneimine) and poly(propyleneimine), with repeating unit of general structure -[X-N[(R₁)_n/L]]-, in which R₁ is a substituent (H, hydrocarbyl or heterohydrocarbyl) that is free of covalent bonds to the polymer backbone, L is a covalent crosslinking agent, n = 1-2, and X is hydrocarbylene or heterohydrocarbylene (preferably C₁-5-alkylene). The polyethyleneimine or polypropyleneimine can be connected to a second polymer (by the crosslinking agent), such as polyethylene, polypropylene, poly(ethylene oxide), poly(propylene oxide), poly(ethylene sulfide), and poly(propylene sulfide). The polymer electrolyte, which can be swollen by or formulated with a plasticizing solvent, are suitable for use in batteries, fuel cells, sensors, supercapacitors, and electrochromic devices. The unsubstituted polyethyleneimine and polypropyleneimine were prepared by ring-opening polymerization of 2-methyloxazoline and 5,6-dihydro-4H-1,3-oxazine, resp., followed by hydrolysis.
- IT 90076-65-6, Lithium bis(trifluoromethylsulfonylimide)
RL: NUU (Other use, unclassified); TEM (Technical or engineered material use); USES (Uses)
(polymer electrolyte containing; synthesis and uses of polyethyleneimine- and polypropyleneimine-based conducting polymer electrolytes, especially for batteries and fuel cells)
- RN 90076-65-6 CAPPLUS
- CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME)



● Li

- L14 ANSWER 86 OF 160 CAPPLUS COPYRIGHT 2005 ACS on STN
AN 2002:517308 CAPPLUS
DN 137:384483
TI Crucial role of the ligand of silyl Lewis acid in the Mukaiyama aldol reaction
AU Ishihara, Kazuaki; Hiraiwa, Yukihiro; Yamamoto, Hisashi
CS Graduate School of Engineering, Nagoya University, SORST, Japan Science and Technology Corporation (JST), Furo-cho, Chikusa, Nagoya, 464-8603, Japan
SO Chemical Communications (Cambridge, United Kingdom) (2002), (15), 1564-1565
CODEN: CHCOFS; ISSN: 1359-7345
PB Royal Society of Chemistry
DT Journal
LA English
OS CASREACT 137:384483
AB The Me₃SiX-induced Mukaiyama aldol reaction proceeds through each catalytic cycle under the influence of X-: the silyl group of Me₃SiNTf₂

does not release from -NTf_2 and that of silyl enol ether intermolecularly transfers to the product, while the silyl group of Me_3SiOTf remains in the product and that of the silyl enol ether becomes the catalyst for the next catalytic cycle.

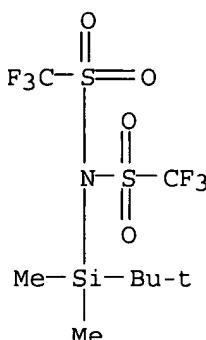
IT 258501-67-6

RL: CAT (Catalyst use); CPS (Chemical process); PEP (Physical, engineering or chemical process); RCT (Reactant); PROC (Process); RACT (Reactant or reagent); USES (Uses)

(crucial role of the ligand of silyl Lewis acid catalyst in the mechanism of the Mukaiyama aldol reaction)

RN 258501-67-6 CAPLUS

CN Methanesulfonamide, N-[(1,1-dimethylethyl)dimethylsilyl]-1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]- (9CI) (CA INDEX NAME)



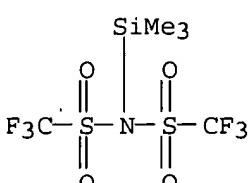
IT 82113-66-4P

RL: CAT (Catalyst use); CPS (Chemical process); PEP (Physical, engineering or chemical process); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); PROC (Process); RACT (Reactant or reagent); USES (Uses)

(crucial role of the ligand of silyl Lewis acid catalyst in the mechanism of the Mukaiyama aldol reaction)

RN 82113-66-4 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-N-(trimethylsilyl)- (9CI) (CA INDEX NAME)



RE.CNT 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 87 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2002:486326 CAPLUS

DN 137:35552

TI Sandwich cathode design using the same active material in varying thicknesses for alkali metal or ion electrochemical cells

IN Gan, Hong; Takeuchi, Esther S.

PA Wilson Greatbatch Ltd., USA

SO Eur. Pat. Appl., 13 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 6

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|------------|
| PI EP 1217672 | A2 | 20020626 | EP 2001-127227 | 20011116 |
| EP 1217672 | A3 | 20050803 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | |
| | | | US 2000-249688P | P 20001117 |
| | | | US 2001-975711 | A 20011011 |
| US 2002062138 | A1 | 20020523 | US 2001-975711 | 20011011 |
| US 6673487 | B2 | 20040106 | | |
| | | | US 2000-249688P | P 20001117 |
| CA 2361031 | AA | 20020517 | CA 2001-2361031 | 20011105 |
| | | | US 2000-249688P | P 20001117 |
| | | | US 2001-975711 | A 20011011 |
| JP 2002198061 | A2 | 20020712 | JP 2001-349778 | 20011115 |
| | | | US 2000-249688P | P 20001117 |
| JP 2002198035 | A2 | 20020712 | JP 2001-351632 | 20011116 |
| | | | US 2000-249688P | P 20001117 |
| JP 2002203607 | A2 | 20020719 | JP 2001-351633 | 20011116 |
| | | | US 2000-249688P | P 20001117 |
| JP 2002237334 | A2 | 20020823 | JP 2001-390626 | 20011116 |
| | | | US 2000-249688P | P 20001117 |
| JP 2002270162 | A2 | 20020920 | JP 2001-390625 | 20011116 |
| | | | US 2000-249688P | P 20001117 |
| JP 2002237310 | A2 | 20020823 | JP 2001-395430 | 20011119 |
| | | | US 2000-249688P | P 20001117 |

PATENT FAMILY INFORMATION:

FAN 2002:391423

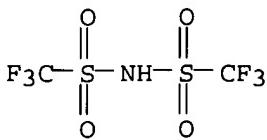
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|------------|
| PI EP 1207567 | A2 | 20020522 | EP 2001-127228 | 20011116 |
| EP 1207567 | A3 | 20050810 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | |
| | | | US 2000-249688P | P 20001117 |
| | | | US 2001-969389 | A 20011002 |
| US 2002090551 | A1 | 20020711 | US 2001-969389 | 20011002 |
| US 6692871 | B2 | 20040217 | | |
| | | | US 2000-249688P | P 20001117 |
| CA 2361030 | AA | 20020517 | CA 2001-2361030 | 20011105 |
| | | | US 2000-249688P | P 20001117 |
| | | | US 2001-969389 | A 20011002 |
| JP 2002198061 | A2 | 20020712 | JP 2001-349778 | 20011115 |
| | | | US 2000-249688P | P 20001117 |
| JP 2002198035 | A2 | 20020712 | JP 2001-351632 | 20011116 |
| | | | US 2000-249688P | P 20001117 |
| JP 2002203607 | A2 | 20020719 | JP 2001-351633 | 20011116 |
| | | | US 2000-249688P | P 20001117 |
| JP 2002237334 | A2 | 20020823 | JP 2001-390626 | 20011116 |
| | | | US 2000-249688P | P 20001117 |
| JP 2002270162 | A2 | 20020920 | JP 2001-390625 | 20011116 |
| | | | US 2000-249688P | P 20001117 |
| JP 2002237310 | A2 | 20020823 | JP 2001-395430 | 20011119 |
| | | | US 2000-249688P | P 20001117 |

FAN 2002:391424

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|------------|
| PI EP 1207568 | A2 | 20020522 | EP 2001-127527 | 20011117 |
| EP 1207568 | A3 | 20050810 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | |
| | | | US 2000-249688P | P 20001117 |
| | | | US 2001-8823 | A 20011024 |

| | | | | | |
|--|-------|----------|-----------------|-------|----------|
| US 2002090548 | A1 | 20020711 | US 2001-8823 | | 20011024 |
| US 6692865 | B2 | 20040217 | US 2000-249688P | P | 20001117 |
| JP 2002198061 | A2 | 20020712 | JP 2001-349778 | | 20011115 |
| | | | US 2000-249688P | P | 20001117 |
| CA 2363282 | AA | 20020517 | CA 2001-2363282 | | 20011116 |
| | | | US 2000-249688P | P | 20001117 |
| | | | US 2001-8823 | A | 20011024 |
| JP 2002198035 | A2 | 20020712 | JP 2001-351632 | | 20011116 |
| | | | US 2000-249688P | P | 20001117 |
| JP 2002203607 | A2 | 20020719 | JP 2001-351633 | | 20011116 |
| | | | US 2000-249688P | P | 20001117 |
| JP 2002237334 | A2 | 20020823 | JP 2001-390626 | | 20011116 |
| | | | US 2000-249688P | P | 20001117 |
| JP 2002270162 | A2 | 20020920 | JP 2001-390625 | | 20011116 |
| | | | US 2000-249688P | P | 20001117 |
| JP 2002237310 | A2 | 20020823 | JP 2001-395430 | | 20011119 |
| | | | US 2000-249688P | P | 20001117 |
| FAN 2002:391425 | | | | | |
| PATENT NO. | KIND | DATE | APPLICATION NO. | | DATE |
| ----- | ----- | ----- | ----- | ----- | ----- |
| PI EP 1207569 | A2 | 20020522 | EP 2001-127528 | | 20011117 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | US 2000-249688P | P | 20001117 |
| | | | US 2001-970341 | A | 20011003 |
| US 2002061437 | A1 | 20020523 | US 2001-970341 | | 20011003 |
| US 6673493 | B2 | 20040106 | | | |
| CA 2361089 | AA | 20020517 | US 2000-249688P | P | 20001117 |
| | | | CA 2001-2361089 | | 20011105 |
| | | | US 2000-249688P | P | 20001117 |
| | | | US 2001-970341 | A | 20011003 |
| JP 2002198061 | A2 | 20020712 | JP 2001-349778 | | 20011115 |
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| JP 2002198035 | A2 | 20020712 | JP 2001-351632 | | 20011116 |
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| JP 2002203607 | A2 | 20020719 | JP 2001-351633 | | 20011116 |
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| JP 2002237334 | A2 | 20020823 | JP 2001-390626 | | 20011116 |
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| JP 2002270162 | A2 | 20020920 | JP 2001-390625 | | 20011116 |
| | | | US 2000-249688P | P | 20001117 |
| JP 2002237310 | A2 | 20020823 | JP 2001-395430 | | 20011119 |
| | | | US 2000-249688P | P | 20001117 |
| FAN 2002:391426 | | | | | |
| PATENT NO. | KIND | DATE | APPLICATION NO. | | DATE |
| ----- | ----- | ----- | ----- | ----- | ----- |
| PI EP 1207570 | A2 | 20020522 | EP 2001-127531 | | 20011118 |
| EP 1207570 | A3 | 20050817 | | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | US 2000-249688P | P | 20001117 |
| | | | US 2001-884 | A | 20011115 |
| JP 2002198061 | A2 | 20020712 | JP 2001-349778 | | 20011115 |
| | | | US 2000-249688P | P | 20001117 |
| US 2002098411 | A1 | 20020725 | US 2001-884 | | 20011115 |
| US 6743550 | B2 | 20040601 | | | |
| CA 2363165 | AA | 20020517 | US 2000-249688P | P | 20001117 |
| | | | CA 2001-2363165 | | 20011116 |
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| | | | US 2001-884 | A | 20011115 |
| JP 2002198035 | A2 | 20020712 | JP 2001-351632 | | 20011116 |
| | | | US 2000-249688P | P | 20001117 |

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| JP 2002203607 | A2 | 20020719 | JP 2001-351633
US 2000-249688P | P 20011116
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US 2000-249688P | P 20011116
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| JP 2002270162 | A2 | 20020920 | JP 2001-390625
US 2000-249688P | P 20011116
20001117 |
| JP 2002237310 | A2 | 20020823 | JP 2001-395430
US 2000-249688P | P 20011119
20001117 |
| FAN 2002:391427 | | | | |
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
| ----- | ---- | ----- | ----- | ----- |
| PI EP 1207571 | A2 | 20020522 | EP 2001-127533 | 20011118 |
| EP 1207571 | A3 | 20050824 | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | |
| US 2002061446 | A1 | 20020523 | US 2000-249688P | P 20001117 |
| US 6737191 | B2 | 20040518 | US 2001-8977 | A 20011108 |
| US 2001-8977 | | | US 2001-8977 | 20011108 |
| JP 2002198061 | A2 | 20020712 | US 2000-249688P | P 20001117 |
| JP 2001-349778 | | | JP 2001-349778 | 20011115 |
| CA 2363162 | AA | 20020517 | CA 2001-2363162 | P 20001117 |
| CA 2001-2363162 | | | US 2000-249688P | 20001117 |
| JP 2002198035 | A2 | 20020712 | US 2001-8977 | A 20011108 |
| JP 2001-351632 | | | JP 2001-351632 | 20011116 |
| JP 2002203607 | A2 | 20020719 | US 2000-249688P | P 20001117 |
| JP 2001-351633 | | | JP 2001-351633 | 20011116 |
| JP 2002237334 | A2 | 20020823 | US 2000-249688P | P 20001117 |
| JP 2001-390626 | | | JP 2001-390626 | 20011116 |
| JP 2002270162 | A2 | 20020920 | US 2000-249688P | P 20001117 |
| JP 2001-390625 | | | JP 2001-390625 | 20011116 |
| JP 2002237310 | A2 | 20020823 | US 2000-249688P | P 20001117 |
| JP 2001-395430 | | | JP 2001-395430 | 20011119 |
| US 2000-249688P | | | US 2000-249688P | P 20001117 |
| AB | A new sandwich cathode design is provided comprising a cathode active material provided in at least two different thicknesses. The different thickness cathode structures are then individually pressed on opposite sides of a current collector so that both are in direct contact with the substrate. Preferably, the cathode structure on the side facing the anode is of a lesser thickness than that on the opposite side of the current collector. Such an exemplary cathode design might look like:
SVO(x)/current collector/SVO(y)/current collector/SVO(z), wherein x, y and z represent thicknesses and wherein x and z are lesser than y. | | | |
| IT 90076-65-6 | RL: DEV (Device component use); USES (Uses)
(sandwich cathode design using same active material in varying thicknesses for alkali metal or ion electrochem. cells) | | | |
| RN 90076-65-6 CAPLUS | | | | |
| CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME) | | | | |



● Li

L14 ANSWER 88 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2002:391429 CAPLUS

DN 136:392355

TI Process for sandwich cathode preparation

IN Gan, Hong; Smesko, Sally Ann; Takeuchi, Esther S.

PA Wilson Greatbatch Ltd., USA

SO Eur. Pat. Appl., 11 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---------------|------|----------|--|--------------------------|
| PI | EP 1207573 | A2 | 20020522 | EP 2001-127532 | 20011118 |
| | EP 1207573 | A3 | 20040421 | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
US 2000-252161P
US 2001-54584 | P 20001117
A 20011113 |
| | US 2002081492 | A1 | 20020627 | US 2001-54584 | 20011113 |
| | US 6743547 | B2 | 20040601 | US 2000-252161P
JP 2001-390636 | P 20001117
20011115 |
| | JP 2002237300 | A2 | 20020823 | US 2000-252161P
CA 2001-2363163 | P 20001117
20011116 |
| | CA 2363163 | AA | 20020517 | US 2000-252161P
US 2001-54584 | P 20001117
A 20011113 |

AB The present comprises an electrode having the configuration: first active material/current collector/s active material. One of the electrode active materials in a cohesive form is incapable of moving through the current collector to the other side thereof. However, in an un-cohesive form, the one electrode active material is capable of communication through the current collector. The other or second active material is in a form in-capable of communication through the current collector, whether it is in a cohesive or un-cohesive powder form. Then, the assembly of first active material/current collector/s active material is pressed from either the direction of the first electrode active material to the second electrode active material, or visa versa.

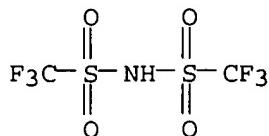
IT 90076-65-6

RL: NUU (Other use, unclassified); USES (Uses)

(electrochem. cell with sandwich cathode and electrolyte containing)

RN 90076-65-6 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME)



● Li

L14 ANSWER 89 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2002:391427 CAPLUS

DN 136:372303

TI Double current collector anode design for alkali metal ion electrochemical

cells

IN Gan, Hong; Rubino, Robert S.; Takeuchi, Esther S.

PA Wilson Greatbatch Ltd., USA

SO Eur. Pat. Appl., 11 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 6

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---------------|------|----------|---|--------------------------|
| PI | EP 1207571 | A2 | 20020522 | EP 2001-127533 | 20011118 |
| | EP 1207571 | A3 | 20050824 | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
US 2000-249688P
US 2001-8977 | P 20001117
A 20011108 |
| | US 2002061446 | A1 | 20020523 | US 2001-8977 | 20011108 |
| | US 6737191 | B2 | 20040518 | US 2000-249688P
JP 2001-349778 | P 20001117
20011115 |
| | JP 2002198061 | A2 | 20020712 | US 2000-249688P
CA 2001-2363162 | P 20001117
20011116 |
| | CA 2363162 | AA | 20020517 | US 2000-249688P
US 2001-8977 | P 20001117
A 20011108 |
| | JP 2002198035 | A2 | 20020712 | JP 2001-351632
US 2000-249688P | 20011116
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| | JP 2002203607 | A2 | 20020719 | JP 2001-351633
US 2000-249688P | 20011116
P 20001117 |
| | JP 2002237334 | A2 | 20020823 | JP 2001-390626
US 2000-249688P | 20011116
P 20001117 |
| | JP 2002270162 | A2 | 20020920 | JP 2001-390625
US 2000-249688P | 20011116
P 20001117 |
| | JP 2002237310 | A2 | 20020823 | JP 2001-395430
US 2000-249688P | 20011119
P 20001117 |

PATENT FAMILY INFORMATION:

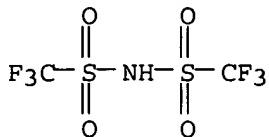
FAN 2002:391423

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---------------|------|----------|---|--------------------------|
| PI | EP 1207567 | A2 | 20020522 | EP 2001-127228 | 20011116 |
| | EP 1207567 | A3 | 20050810 | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
US 2000-249688P
US 2001-969389 | P 20001117
A 20011002 |
| | US 2002090551 | A1 | 20020711 | US 2001-969389 | 20011002 |
| | US 6692871 | B2 | 20040217 | US 2000-249688P
CA 2001-2361030 | P 20001117
20011105 |
| | CA 2361030 | AA | 20020517 | US 2000-249688P
US 2001-969389 | P 20001117
A 20011002 |
| | JP 2002198061 | A2 | 20020712 | JP 2001-349778
US 2000-249688P | 20011115
P 20001117 |
| | JP 2002198035 | A2 | 20020712 | JP 2001-351632
US 2000-249688P | 20011116
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| | JP 2002203607 | A2 | 20020719 | JP 2001-351633
US 2000-249688P | 20011116
P 20001117 |
| | JP 2002237334 | A2 | 20020823 | JP 2001-390626
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| | JP 2002270162 | A2 | 20020920 | JP 2001-390625
US 2000-249688P | 20011116
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| | JP 2002237310 | A2 | 20020823 | JP 2001-395430
US 2000-249688P | 20011119
P 20001117 |

FAN 2002:391424

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-----|--|--|----------|-----------------|------------|
| PI | EP 1207568 | A2 | 20020522 | EP 2001-127527 | 20011117 |
| | EP 1207568 | A3 | 20050810 | | |
| | R: AT, BE, CH, DE, DK, ES, FR, IE, SI, LT, LV, FI, RO, MK, | GB, GR, IT, LI, LU, NL, SE, MC, PT, CY, AL, TR | | | |
| | US 2002090548 | A1 | 20020711 | US 2000-249688P | P 20001117 |
| | US 6692865 | B2 | 20040217 | US 2001-8823 | A 20011024 |
| | | | | US 2001-8823 | 20011024 |
| | JP 2002198061 | A2 | 20020712 | JP 2001-349778 | 20011115 |
| | | | | US 2000-249688P | P 20001117 |
| | CA 2363282 | AA | 20020517 | CA 2001-2363282 | 20011116 |
| | | | | US 2000-249688P | P 20001117 |
| | JP 2002198035 | A2 | 20020712 | US 2001-8823 | A 20011024 |
| | | | | JP 2001-351632 | 20011116 |
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| | | | | JP 2001-395430 | 20011119 |
| | | | | US 2000-249688P | P 20001117 |
| FAN | 2002:391425 | | | | |
| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
| PI | EP 1207569 | A2 | 20020522 | EP 2001-127528 | 20011117 |
| | R: AT, BE, CH, DE, DK, ES, FR, IE, SI, LT, LV, FI, RO, MK, | GB, GR, IT, LI, LU, NL, SE, MC, PT, CY, AL, TR | | | |
| | US 2002061437 | A1 | 20020523 | US 2000-249688P | P 20001117 |
| | US 6673493 | B2 | 20040106 | US 2001-970341 | A 20011003 |
| | | | | US 2001-970341 | 20011003 |
| | CA 2361089 | AA | 20020517 | CA 2001-2361089 | 20011105 |
| | | | | US 2000-249688P | P 20001117 |
| | | | | US 2001-970341 | A 20011003 |
| | JP 2002198061 | A2 | 20020712 | JP 2001-349778 | 20011115 |
| | | | | US 2000-249688P | P 20001117 |
| | JP 2002198035 | A2 | 20020712 | JP 2001-351632 | 20011116 |
| | | | | US 2000-249688P | P 20001117 |
| | JP 2002203607 | A2 | 20020719 | JP 2001-351633 | 20011116 |
| | | | | US 2000-249688P | P 20001117 |
| | JP 2002237334 | A2 | 20020823 | JP 2001-390626 | 20011116 |
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| | JP 2002270162 | A2 | 20020920 | JP 2001-390625 | 20011116 |
| | | | | US 2000-249688P | P 20001117 |
| | JP 2002237310 | A2 | 20020823 | JP 2001-395430 | 20011119 |
| | | | | US 2000-249688P | P 20001117 |
| FAN | 2002:391426 | | | | |
| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
| PI | EP 1207570 | A2 | 20020522 | EP 2001-127531 | 20011118 |
| | EP 1207570 | A3 | 20050817 | | |
| | R: AT, BE, CH, DE, DK, ES, FR, IE, SI, LT, LV, FI, RO, MK, | GB, GR, IT, LI, LU, NL, SE, MC, PT, CY, AL, TR | | | |
| | | | | US 2000-249688P | P 20001117 |
| | | | | US 2001-884 | A 20011115 |
| | JP 2002198061 | A2 | 20020712 | JP 2001-349778 | 20011115 |
| | | | | US 2000-249688P | P 20001117 |

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| US 2002098411 | A1 | 20020725 | US 2001-884 | 20011115 | |
| US 6743550 | B2 | 20040601 | | | |
| CA 2363165 | AA | 20020517 | US 2000-249688P | P 20001117 | |
| | | | CA 2001-2363165 | 20011116 | |
| | | | US 2000-249688P | P 20001117 | |
| | | | US 2001-884 | A 20011115 | |
| JP 2002198035 | A2 | 20020712 | JP 2001-351632 | 20011116 | |
| | | | US 2000-249688P | P 20001117 | |
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| | | | US 2000-249688P | P 20001117 | |
| JP 2002237334 | A2 | 20020823 | JP 2001-390626 | 20011116 | |
| | | | US 2000-249688P | P 20001117 | |
| JP 2002270162 | A2 | 20020920 | JP 2001-390625 | 20011116 | |
| | | | US 2000-249688P | P 20001117 | |
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| | | | US 2000-249688P | P 20001117 | |
| FAN | 2002:486326 | | | | |
| | PATENT NO. | KIND | DATE | APPLICATION NO. | |
| PI | EP 1217672 | A2 | 20020626 | EP 2001-127227 | |
| | EP 1217672 | A3 | 20050803 | 20011116 | |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | |
| | | | US 2000-249688P | P 20001117 | |
| | | | US 2001-975711 | A 20011011 | |
| | US 2002062138 | A1 | 20020523 | US 2001-975711 | |
| | US 6673487 | B2 | 20040106 | 20011011 | |
| | | | US 2000-249688P | P 20001117 | |
| | CA 2361031 | AA | 20020517 | CA 2001-2361031 | |
| | | | US 2000-249688P | P 20001117 | |
| | | | US 2001-975711 | A 20011011 | |
| | JP 2002198061 | A2 | 20020712 | JP 2001-349778 | |
| | | | US 2000-249688P | P 20001117 | |
| | JP 2002198035 | A2 | 20020712 | JP 2001-351632 | |
| | | | US 2000-249688P | P 20001117 | |
| | JP 2002203607 | A2 | 20020719 | JP 2001-351633 | |
| | | | US 2000-249688P | P 20001117 | |
| | JP 2002237334 | A2 | 20020823 | JP 2001-390626 | |
| | | | US 2000-249688P | P 20001117 | |
| | JP 2002270162 | A2 | 20020920 | JP 2001-390625 | |
| | | | US 2000-249688P | P 20001117 | |
| | JP 2002237310 | A2 | 20020823 | JP 2001-395430 | |
| | | | US 2000-249688P | P 20001117 | |
| AB | A new sandwich neg. electrode design for a secondary cell is provided comprising a "sacrificial" alkali metal along with a carbonaceous anode material. In the case of a hard carbon anode material, the sacrificial alkali metal is preferably lithium and is sized to compensate for the initial irreversible capacity of this anode material. Upon activating the cells, the lithium metal automatically intercalates into the hard carbon anode material. That way, the sacrificial lithium is consumed and compensates for the generally unacceptable irreversible capacity of hard carbon. The superior cycling longevity of hard carbon now provides a secondary cell of extended use beyond that known for conventional secondary cells having only graphitic anode materials. | | | | |
| IT | 90076-65-6
RL: DEV (Device component use); USES (Uses)
(double current collector anode design for alkali metal ion electrochem. cells) | | | | |
| RN | 90076-65-6 CAPLUS | | | | |
| CN | Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME) | | | | |



● Li

L14 ANSWER 90 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2002:391426 CAPLUS
DN 136:372302
TI Sandwich cathode design using chemically similar active materials for alkali metal electrochemical cells
IN Gan, Hong; Takeuchi, Esther S.
PA Wilson Greatbatch Ltd., USA
SO Eur. Pat. Appl., 10 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 6

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---------------|------|----------|--|--------------------------------------|
| PI | EP 1207570 | A2 | 20020522 | EP 2001-127531 | 20011118 |
| | EP 1207570 | A3 | 20050817 | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
US 2000-249688P
US 2001-884 | P 20001117
A 20011115 |
| | JP 2002198061 | A2 | 20020712 | JP 2001-349778
US 2000-249688P | 20011115
P 20001117 |
| | US 2002098411 | A1 | 20020725 | US 2001-884 | 20011115 |
| | US 6743550 | B2 | 20040601 | US 2000-249688P | P 20001117 |
| | CA 2363165 | AA | 20020517 | CA 2001-2363165
US 2000-249688P
US 2001-884 | 20011116
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US 2000-249688P | 20011116
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| | JP 2002270162 | A2 | 20020920 | JP 2001-390625
US 2000-249688P | 20011116
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| | JP 2002237310 | A2 | 20020823 | JP 2001-395430
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P 20001117 |

PATENT FAMILY INFORMATION:

FAN 2002:391423

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---------------|------|----------|---|--------------------------|
| PI | EP 1207567 | A2 | 20020522 | EP 2001-127228 | 20011116 |
| | EP 1207567 | A3 | 20050810 | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
US 2000-249688P
US 2001-969389 | P 20001117
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| | US 2002090551 | A1 | 20020711 | US 2001-969389 | 20011002 |
| | US 6692871 | B2 | 20040217 | US 2000-249688P | P 20001117 |

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| CA 2361030 | AA | 20020517 | CA 2001-2361030
US 2000-249688P
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| JP 2002203607 | A2 | 20020719 | JP 2001-351633
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| FAN 2002:391424 | | | | |
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
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| PI EP 1207568 | A2 | 20020522 | EP 2001-127527 | 20011117 |
| EP 1207568 | A3 | 20050810 | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
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| US 2002090548 | A1 | 20020711 | US 2001-8823 | A 20011024 |
| US 6692865 | B2 | 20040217 | US 2001-8823 | 20011024 |
| JP 2002198061 | A2 | 20020712 | JP 2001-349778
US 2000-249688P | P 20001117
20011115 |
| CA 2363282 | AA | 20020517 | CA 2001-2363282
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US 2000-249688P | A 20011024
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US 2000-249688P | P 20001117 |
| JP 2002237334 | A2 | 20020823 | JP 2001-390626
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| JP 2002270162 | A2 | 20020920 | JP 2001-390625
US 2000-249688P | P 20001117 |
| JP 2002237310 | A2 | 20020823 | JP 2001-395430
US 2000-249688P | P 20001117 |
| FAN 2002:391425 | | | | |
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
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| PI EP 1207569 | A2 | 20020522 | EP 2001-127528 | 20011117 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | US 2000-249688P | P 20001117 |
| US 2002061437 | A1 | 20020523 | US 2001-970341 | A 20011003 |
| US 6673493 | B2 | 20040106 | US 2001-970341 | 20011003 |
| CA 2361089 | AA | 20020517 | US 2000-249688P
CA 2001-2361089
US 2000-249688P | P 20001117
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JP 2001-349778
US 2000-249688P | A 20011003
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P 20001117 |
| JP 2002198035 | A2 | 20020712 | JP 2001-351632
US 2000-249688P | P 20001117
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| JP 2002203607 | A2 | 20020719 | JP 2001-351633
US 2000-249688P | P 20001117 |
| JP 2002237334 | A2 | 20020823 | JP 2001-390626
US 2000-249688P | P 20001117
20011116 |

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| JP 2002270162 | A2 | 20020920 | JP 2001-390625 | | | 20011116 |
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| JP 2002237310 | A2 | 20020823 | JP 2001-395430 | | | 20011119 |
| | | | US 2000-249688P | P | 20001117 | |
| FAN | 2002:391427 | | | | | |
| | PATENT NO. | KIND | DATE | APPLICATION NO. | | DATE |
| PI | EP 1207571 | A2 | 20020522 | EP 2001-127533 | | 20011118 |
| | EP 1207571 | A3 | 20050824 | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | |
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| | | | | US 2001-8977 | A | 20011108 |
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| US 6737191 | B2 | 20040518 | | | | |
| JP 2002198061 | A2 | 20020712 | US 2000-249688P | P | 20001117 | |
| | | | JP 2001-349778 | | | 20011115 |
| | | | US 2000-249688P | P | 20001117 | |
| CA 2363162 | AA | 20020517 | CA 2001-2363162 | | | 20011116 |
| | | | US 2000-249688P | P | 20001117 | |
| | | | US 2001-8977 | A | 20011108 | |
| JP 2002198035 | A2 | 20020712 | JP 2001-351632 | | | 20011116 |
| | | | US 2000-249688P | P | 20001117 | |
| JP 2002203607 | A2 | 20020719 | JP 2001-351633 | | | 20011116 |
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| JP 2002237310 | A2 | 20020823 | JP 2001-395430 | | | 20011119 |
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| FAN | 2002:486326 | | | | | |
| | PATENT NO. | KIND | DATE | APPLICATION NO. | | DATE |
| PI | EP 1217672 | A2 | 20020626 | EP 2001-127227 | | 20011116 |
| | EP 1217672 | A3 | 20050803 | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | |
| | | | US 2000-249688P | P | 20001117 | |
| | | | US 2001-975711 | A | 20011011 | |
| US 2002062138 | A1 | 20020523 | US 2001-975711 | | | 20011011 |
| US 6673487 | B2 | 20040106 | | | | |
| CA 2361031 | AA | 20020517 | US 2000-249688P | P | 20001117 | |
| | | | CA 2001-2361031 | | | 20011105 |
| | | | US 2000-249688P | P | 20001117 | |
| | | | US 2001-975711 | A | 20011011 | |
| JP 2002198061 | A2 | 20020712 | JP 2001-349778 | | | 20011115 |
| | | | US 2000-249688P | P | 20001117 | |
| JP 2002198035 | A2 | 20020712 | JP 2001-351632 | | | 20011116 |
| | | | US 2000-249688P | P | 20001117 | |
| JP 2002203607 | A2 | 20020719 | JP 2001-351633 | | | 20011116 |
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| JP 2002237334 | A2 | 20020823 | JP 2001-390626 | | | 20011116 |
| | | | US 2000-249688P | P | 20001117 | |
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| JP 2002237310 | A2 | 20020823 | JP 2001-395430 | | | 20011119 |
| | | | US 2000-249688P | P | 20001117 | |
| AB | The invention relates to a new sandwich cathode design having 2 cathode active materials provided on opposite sides of a current collector. The resp. active materials are similar in terms of, e.g., their rate capability, their energy d., or some other parameter. However, one | | | | | |

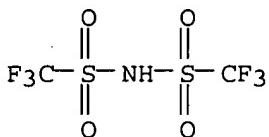
material may have an advantage over the other in one characteristic, but is disadvantageous in another. The cathode is built in a sandwich configuration having a first one of the active materials sandwiched between 2 current collectors. Then, the second active material is provided in contact with at least the other side of one of the current collectors, and preferably facing the anode. An example of the cathode has the configuration: MnO₂/current collector/**silver** vanadium oxide/current collector/MnO₂.

IT 90076-65-6

RL: DEV (Device component use); USES (Uses)
(sandwich cathode design using chemical similar active materials for alkali metal electrochem. cells)

RN 90076-65-6 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME)



● Li

L14 ANSWER 91 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2002:391425 CAPLUS

DN 136:372301

TI Sandwich cathode design using the same active material in varying formulations for alkali metal or ion batteries

IN Gan, Hong; Takeuchi, Esther S.

PA Wilson Greatbatch Ltd., USA

SO Eur. Pat. Appl., 11 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 6

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---|------|----------|-----------------|------------|
| PI | EP 1207569 | A2 | 20020522 | EP 2001-127528 | 20011117 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | US 2000-249688P | P 20001117 |
| | | | | US 2001-970341 | A 20011003 |
| | US 2002061437 | A1 | 20020523 | US 2001-970341 | 20011003 |
| | US 6673493 | B2 | 20040106 | | |
| | CA 2361089 | AA | 20020517 | US 2000-249688P | P 20001117 |
| | | | | CA 2001-2361089 | 20011105 |
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| | | | | US 2001-970341 | A 20011003 |
| | JP 2002198061 | A2 | 20020712 | JP 2001-349778 | 20011115 |
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| | JP 2002198035 | A2 | 20020712 | JP 2001-351632 | 20011116 |
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| | JP 2002203607 | A2 | 20020719 | JP 2001-351633 | 20011116 |
| | | | | US 2000-249688P | P 20001117 |
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| JP 2002237310 | A2 | 20020823 | US 2000-249688P
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US 2000-249688P | P 20001117
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PATENT FAMILY INFORMATION:

FAN 2002:391423

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
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| PI | EP 1207567 | A2 | 20020522 | EP 2001-127228 | 20011116 |
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IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
US 2000-249688P
US 2001-969389
US 2001-969389 | P 20001117
A 20011002
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US 2001-969389 | P 20001117
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| | JP 2002198061 | A2 | 20020712 | JP 2001-349778
US 2000-249688P | P 20011115
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FAN 2002:391424

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
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US 2001-8823 | P 20001117
A 20011024
20011024 |
| | US 2002090548 | A1 | 20020711 | US 2000-249688P | P 20001117 |
| | US 6692865 | B2 | 20040217 | CA 2001-2363282
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P 20001117
A 20011024 |
| | JP 2002198061 | A2 | 20020712 | JP 2001-349778
US 2000-249688P | P 20011115
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US 2000-249688P | P 20011119
P 20001117 |

FAN 2002:391426

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
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| PI | EP 1207570 | A2 | 20020522 | EP 2001-127531 | 20011118 |
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| US 2002098411 | A1 | 20020725 | US 2001-884 | | 20011115 | |
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| FAN 2002:391427 | | | | | | |
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| | | | US 2000-249688P | P | 20001117 | |
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| | | | US 2000-249688P | P | 20001117 | |
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| FAN 2002:486326 | | | | | | |
| PATENT NO. | KIND | DATE | APPLICATION NO. | | DATE | |
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| PI EP 1217672 | A2 | 20020626 | EP 2001-127227 | | 20011116 | |
| EP 1217672 | A3 | 20050803 | | | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
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| US 6673487 | B2 | 20040106 | | | | |
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| CA 2361031 | AA | 20020517 | CA 2001-2361031 | | 20011105 | |
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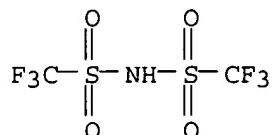
AB A new sandwich cathode design comprises a cathode active material mixed with a binder and a conductive diluent in ≥ 2 differing formulations. The formulations are then individually pressed on opposite sides of a current collector, so that both are in direct contact with the current collector. Preferably, the active formulation on the side of the current collector facing the anode is of a lesser percentage of the active material than that on the opposite side of the current collector. Such an exemplary cathode design is: silver vanadium oxide (SVO) (100-x% active)/current collector/SVO(100-y% active)/current collector/SVO(100-x% active), wherein $x > y$.

IT 90076-65-6

RL: DEV (Device component use); USES (Uses)
(sandwich cathode design using same active material in varying formulations for alkali metal or ion batteries)

RN 90076-65-6 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME)



● Li

L14 ANSWER 92 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2002:391424 CAPLUS
DN 136:372300
TI Sandwich cathode design using mixtures of two active materials for alkali metal or ion batteries
IN Gan, Hong; Takeuchi, Esther S.
PA Wilson Greatbatch Ltd., USA
SO Eur. Pat. Appl., 17 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 6

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
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| PI | EP 1207568 | A2 | 20020522 | EP 2001-127527 | 20011117 |
| | EP 1207568 | A3 | 20050810 | | |
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IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | |
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PATENT FAMILY INFORMATION:

FAN 2002:391423

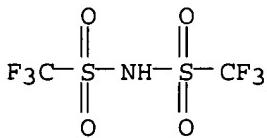
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| | EP 1207567 | A3 | 20050810 | | |
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FAN 2002:391425

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|--|------|----------|-----------------|------------|
| PI | EP 1207569 | A2 | 20020522 | EP 2001-127528 | 20011117 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | US 2000-249688P | P 20001117 |
| | | | | US 2001-970341 | A 20011003 |
| | US 2002061437 | A1 | 20020523 | US 2001-970341 | 20011003 |
| | US 6673493 | B2 | 20040106 | | |
| | | | | US 2000-249688P | P 20001117 |
| | CA 2361089 | AA | 20020517 | CA 2001-2361089 | 20011105 |
| | | | | US 2000-249688P | P 20001117 |
| | | | | US 2001-970341 | A 20011003 |
| | JP 2002198061 | A2 | 20020712 | JP 2001-349778 | 20011115 |
| | | | | US 2000-249688P | P 20001117 |

| | | | | | |
|------------------------|-------------|-------------|--|---|--|
| JP 2002198035 | A2 | 20020712 | JP 2001-351632
US 2000-249688P | P 20001116
20001117 | |
| JP 2002203607 | A2 | 20020719 | JP 2001-351633
US 2000-249688P | P 20001116
20001117 | |
| JP 2002237334 | A2 | 20020823 | JP 2001-390626
US 2000-249688P | P 20001116
20001117 | |
| JP 2002270162 | A2 | 20020920 | JP 2001-390625
US 2000-249688P | P 20001116
20001117 | |
| JP 2002237310 | A2 | 20020823 | JP 2001-395430
US 2000-249688P | P 20001119
20001117 | |
| FAN 2002:391426 | | | | | |
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE | |
| ----- | ----- | ----- | ----- | ----- | |
| PI EP 1207570 | A2 | 20020522 | EP 2001-127531 | 20001118 | |
| EP 1207570 | A3 | 20050817 | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | US 2000-249688P
US 2001-884
JP 2001-349778
US 2000-249688P | P 20001117
A 20011115
20011115
P 20001117 |
| JP 2002198061 | A2 | 20020712 | US 2001-884 | 20011115 | |
| US 2002098411 | A1 | 20020725 | JP 2001-349778 | 20011115 | |
| US 6743550 | B2 | 20040601 | US 2000-249688P | P 20001117 | |
| CA 2363165 | AA | 20020517 | US 2001-884 | A 20011115 | |
| JP 2002198035 | A2 | 20020712 | JP 2001-351632 | 20011116 | |
| JP 2002203607 | A2 | 20020719 | US 2000-249688P | P 20001117 | |
| JP 2002237334 | A2 | 20020823 | JP 2001-351633 | 20011116 | |
| JP 2002270162 | A2 | 20020920 | US 2000-249688P | P 20001117 | |
| JP 2002237310 | A2 | 20020823 | JP 2001-390626 | 20011116 | |
| JP 2002198035 | A2 | 20020712 | US 2000-249688P | P 20001117 | |
| JP 2002203607 | A2 | 20020719 | JP 2001-390625 | 20011117 | |
| JP 2002237334 | A2 | 20020823 | US 2000-249688P | P 20001117 | |
| JP 2002270162 | A2 | 20020920 | JP 2001-395430 | 20011119 | |
| JP 2002237310 | A2 | 20020823 | US 2000-249688P | P 20001117 | |
| FAN 2002:391427 | | | | | |
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE | |
| ----- | ----- | ----- | ----- | ----- | |
| PI EP 1207571 | A2 | 20020522 | EP 2001-127533 | 20011118 | |
| EP 1207571 | A3 | 20050824 | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | US 2000-249688P
US 2001-8977 | P 20001117
A 20011108 |
| US 2002061446 | A1 | 20020523 | US 2001-8977 | 20011108 | |
| US 6737191 | B2 | 20040518 | US 2000-249688P | P 20001117 | |
| JP 2002198061 | A2 | 20020712 | JP 2001-349778 | 20011115 | |
| CA 2363162 | AA | 20020517 | US 2000-249688P | P 20001117 | |
| JP 2002198035 | A2 | 20020712 | CA 2001-2363162 | 20011116 | |
| JP 2002203607 | A2 | 20020719 | US 2000-249688P | P 20001117 | |
| JP 2002237334 | A2 | 20020823 | US 2001-8977 | A 20011108 | |
| JP 2002270162 | A2 | 20020920 | JP 2001-351632 | 20011116 | |
| JP 2002237310 | A2 | 20020823 | US 2000-249688P | P 20001117 | |
| JP 2002198035 | A2 | 20020712 | JP 2001-351633 | 20011116 | |
| JP 2002203607 | A2 | 20020719 | US 2000-249688P | P 20001117 | |
| JP 2002237334 | A2 | 20020823 | JP 2001-390626 | 20011116 | |
| JP 2002270162 | A2 | 20020920 | US 2000-249688P | P 20001117 | |
| JP 2002237310 | A2 | 20020823 | JP 2001-390625 | 20011116 | |
| JP 2002198035 | A2 | 20020712 | US 2000-249688P | P 20001117 | |
| JP 2002203607 | A2 | 20020719 | JP 2001-395430 | 20011119 | |

| FAN | 2002:486326 | | US 2000-249688P | P | 20001117 |
|-----|---|------|-----------------|-----------------|------------|
| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
| PI | EP 1217672 | A2 | 20020626 | EP 2001-127227 | 20011116 |
| | EP 1217672 | A3 | 20050803 | | |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | |
| | | | | US 2000-249688P | P 20001117 |
| | | | | US 2001-975711 | A 20011011 |
| | US 2002062138 | A1 | 20020523 | US 2001-975711 | 20011011 |
| | US 6673487 | B2 | 20040106 | | |
| | | | | US 2000-249688P | P 20001117 |
| | CA 2361031 | AA | 20020517 | CA 2001-2361031 | 20011105 |
| | / | | | US 2000-249688P | P 20001117 |
| | JP 2002198061 | A2 | 20020712 | US 2001-975711 | A 20011011 |
| | / | | | JP 2001-349778 | 20011115 |
| | JP 2002198035 | A2 | 20020712 | US 2000-249688P | P 20001117 |
| | / | | | JP 2001-351632 | 20011116 |
| | JP 2002203607 | A2 | 20020719 | US 2000-249688P | P 20001117 |
| | / | | | JP 2001-351633 | 20011116 |
| | JP 2002237334 | A2 | 20020823 | US 2000-249688P | P 20001117 |
| | / | | | JP 2001-390626 | 20011116 |
| | JP 2002270162 | A2 | 20020920 | US 2000-249688P | P 20001117 |
| | / | | | JP 2001-390625 | 20011116 |
| | JP 2002237310 | A2 | 20020823 | US 2000-249688P | P 20001117 |
| | / | | | JP 2001-395430 | 20011119 |
| | | | | US 2000-249688P | P 20001117 |
| AB | A new sandwich cathode design is provided having a first cathode structure of a first cathode active material of a relatively low energy d. but of a relatively high rate capacity, e.g. silver vanadium oxide (SVO), mixed with a second cathode active material having a relatively high energy d. but a relatively low rate capability, e.g. CF _x , with the percentage of SVO being less than that of CF _x and sandwiched between 2 current collectors. Then, a second cathode mixture of SVO and CF _x active materials is contacted to the outside of the current collectors. However, the percentage of SVO to CF _x is greater in the second structure than in the first. Such an exemplary cathode design is (100-y)% SVO +y% CF _x , wherein 0≤y≤100/current collector/(100-x)% SVO + x% CF _x , wherein 0≤x≤100/current collector//(100-y)% SVO + y% CF _x , wherein 0≤y≤100, and wherein the ratio of x to y is selected from the group consisting of y<x, x<y and x=y. | | | | |
| IT | 90076-65-6
RL: DEV (Device component use); USES (Uses)
(sandwich cathode design using mixts. of two active materials for alkali metal or ion batteries) | | | | |
| RN | 90076-65-6 CAPLUS | | | | |
| CN | Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME) | | | | |



● Li

L14 ANSWER 93 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2002:391423 CAPLUS
 DN 136:372299
 TI Sandwich cathode design for alkali metal electrochemical cells having circuit safety characteristics
 IN Gan, Hong; Takeuchi, Esther S.
 PA Wilson Greatbatch Ltd., USA
 SO Eur. Pat. Appl., 11 pp.
 CODEN: EPXXDW
 DT Patent
 LA English
 FAN.CNT 6

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---------------|------|----------|---|--------------------------|
| PI | EP 1207567 | A2 | 20020522 | EP 2001-127228 | 20011116 |
| | EP 1207567 | A3 | 20050810 | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
US 2000-249688P
US 2001-969389 | P 20001117
A 20011002 |
| | US 2002090551 | A1 | 20020711 | US 2001-969389 | 20011002 |
| | US 6692871 | B2 | 20040217 | US 2000-249688P
CA 2001-2361030 | P 20001117
20011105 |
| | CA 2361030 | AA | 20020517 | US 2000-249688P
US 2001-969389 | P 20001117
A 20011002 |
| | JP 2002198061 | A2 | 20020712 | JP 2001-349778
US 2000-249688P | 20011115
P 20001117 |
| | JP 2002198035 | A2 | 20020712 | JP 2001-351632
US 2000-249688P | 20011116
P 20001117 |
| | JP 2002203607 | A2 | 20020719 | JP 2001-351633
US 2000-249688P | 20011116
P 20001117 |
| | JP 2002237334 | A2 | 20020823 | JP 2001-390626
US 2000-249688P | 20011116
P 20001117 |
| | JP 2002270162 | A2 | 20020920 | JP 2001-390625
US 2000-249688P | 20011116
P 20001117 |
| | JP 2002237310 | A2 | 20020823 | JP 2001-395430
US 2000-249688P | 20011119
P 20001117 |

PATENT FAMILY INFORMATION:

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---------------|------|----------|---|--------------------------|
| PI | EP 1207568 | A2 | 20020522 | EP 2001-127527 | 20011117 |
| | EP 1207568 | A3 | 20050810 | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
US 2000-249688P
US 2001-8823 | P 20001117
A 20011024 |
| | US 2002090548 | A1 | 20020711 | US 2001-8823 | 20011024 |
| | US 6692865 | B2 | 20040217 | US 2000-249688P
CA 2001-2363282 | P 20001117
20011116 |
| | JP 2002198061 | A2 | 20020712 | JP 2001-349778
US 2000-249688P | 20011115
P 20001117 |
| | CA 2363282 | AA | 20020517 | US 2000-249688P
US 2001-8823 | P 20001117
A 20011024 |
| | JP 2002198035 | A2 | 20020712 | JP 2001-351632
US 2000-249688P | 20011116
P 20001117 |
| | JP 2002203607 | A2 | 20020719 | JP 2001-351633
US 2000-249688P | 20011116
P 20001117 |
| | JP 2002237334 | A2 | 20020823 | JP 2001-390626
US 2000-249688P | 20011116
P 20001117 |
| | JP 2002270162 | A2 | 20020920 | JP 2001-390625
JP 2001-390625 | 20011116 |

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|--|------------|----------|-----------------|-----------------|----------|
| | | | US 2000-249688P | P | 20001117 |
| JP 2002237310 | A2 | 20020823 | JP 2001-395430 | | 20011119 |
| | | | US 2000-249688P | P | 20001117 |
| FAN 2002:391425 | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
| ----- | ----- | ----- | ----- | ----- | ----- |
| PI EP 1207569 | A2 | 20020522 | EP 2001-127528 | | 20011117 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | | |
| | | | US 2000-249688P | P | 20001117 |
| | | | US 2001-970341 | A | 20011003 |
| US 2002061437 | A1 | 20020523 | US 2001-970341 | | 20011003 |
| US 6673493 | B2 | 20040106 | | | |
| CA 2361089 | AA | 20020517 | US 2000-249688P | P | 20001117 |
| | | | CA 2001-2361089 | | 20011105 |
| | | | US 2000-249688P | P | 20001117 |
| | | | US 2001-970341 | A | 20011003 |
| JP 2002198061 | A2 | 20020712 | JP 2001-349778 | | 20011115 |
| | | | US 2000-249688P | P | 20001117 |
| JP 2002198035 | A2 | 20020712 | JP 2001-351632 | | 20011116 |
| | | | US 2000-249688P | P | 20001117 |
| JP 2002203607 | A2 | 20020719 | JP 2001-351633 | | 20011116 |
| | | | US 2000-249688P | P | 20001117 |
| JP 2002237334 | A2 | 20020823 | JP 2001-390626 | | 20011116 |
| | | | US 2000-249688P | P | 20001117 |
| JP 2002270162 | A2 | 20020920 | JP 2001-390625 | | 20011116 |
| | | | US 2000-249688P | P | 20001117 |
| JP 2002237310 | A2 | 20020823 | JP 2001-395430 | | 20011119 |
| | | | US 2000-249688P | P | 20001117 |
| FAN 2002:391426 | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
| ----- | ----- | ----- | ----- | ----- | ----- |
| PI EP 1207570 | A2 | 20020522 | EP 2001-127531 | | 20011118 |
| EP 1207570 | A3 | 20050817 | | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | | |
| | | | US 2000-249688P | P | 20001117 |
| | | | US 2001-884 | A | 20011115 |
| JP 2002198061 | A2 | 20020712 | JP 2001-349778 | | 20011115 |
| | | | US 2000-249688P | P | 20001117 |
| US 2002098411 | A1 | 20020725 | US 2001-884 | | 20011115 |
| US 6743550 | B2 | 20040601 | | | |
| CA 2363165 | AA | 20020517 | US 2000-249688P | P | 20001117 |
| | | | CA 2001-2363165 | | 20011116 |
| | | | US 2000-249688P | P | 20001117 |
| | | | US 2001-884 | A | 20011115 |
| JP 2002198035 | A2 | 20020712 | JP 2001-351632 | | 20011116 |
| | | | US 2000-249688P | P | 20001117 |
| JP 2002203607 | A2 | 20020719 | JP 2001-351633 | | 20011116 |
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| JP 2002237334 | A2 | 20020823 | JP 2001-390626 | | 20011116 |
| | | | US 2000-249688P | P | 20001117 |
| JP 2002270162 | A2 | 20020920 | JP 2001-390625 | | 20011116 |
| | | | US 2000-249688P | P | 20001117 |
| JP 2002237310 | A2 | 20020823 | JP 2001-395430 | | 20011119 |
| | | | US 2000-249688P | P | 20001117 |
| FAN 2002:391427 | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
| ----- | ----- | ----- | ----- | ----- | ----- |
| PI EP 1207571 | A2 | 20020522 | EP 2001-127533 | | 20011118 |
| EP 1207571 | A3 | 20050824 | | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | | |

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|---------------|----|----------|----|--------------|---|----------|
| | | | US | 2000-249688P | P | 20001117 |
| | | | US | 2001-8977 | A | 20011108 |
| US 2002061446 | A1 | 20020523 | US | 2001-8977 | | 20011108 |
| US 6737191 | B2 | 20040518 | US | 2000-249688P | P | 20001117 |
| JP 2002198061 | A2 | 20020712 | JP | 2001-349778 | | 20011115 |
| | | | US | 2000-249688P | P | 20001117 |
| CA 2363162 | AA | 20020517 | CA | 2001-2363162 | | 20011116 |
| | | | US | 2000-249688P | P | 20001117 |
| | | | US | 2001-8977 | A | 20011108 |
| JP 2002198035 | A2 | 20020712 | JP | 2001-351632 | | 20011116 |
| | | | US | 2000-249688P | P | 20001117 |
| JP 2002203607 | A2 | 20020719 | JP | 2001-351633 | | 20011116 |
| | | | US | 2000-249688P | P | 20001117 |
| JP 2002237334 | A2 | 20020823 | JP | 2001-390626 | | 20011116 |
| | | | US | 2000-249688P | P | 20001117 |
| JP 2002270162 | A2 | 20020920 | JP | 2001-390625 | | 20011116 |
| | | | US | 2000-249688P | P | 20001117 |
| JP 2002237310 | A2 | 20020823 | JP | 2001-395430 | | 20011119 |
| | | | US | 2000-249688P | P | 20001117 |

FAN 2002:486326

PATENT NO.

KIND

DATE

APPLICATION NO.

DATE

PI EP 1217672

A2

20020626

EP 2001-127227

20011116

EP 1217672

A3

20050803

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

US 2000-249688P

P 20001117

US 2001-975711

A 20011011

US 2002062138

A1

20020523

US 2001-975711

20011011

US 6673487

B2

20040106

US 2000-249688P

P 20001117

CA 2361031

AA

20020517

CA 2001-2361031

20011105

US 2000-249688P

P 20001117

US 2001-975711

A 20011011

JP 2002198061

A2

20020712

JP 2001-349778

20011115

US 2000-249688P

P 20001117

JP 2002198035

A2

20020712

JP 2001-351632

20011116

US 2000-249688P

P 20001117

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A2

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US 2000-249688P

P 20001117

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US 2000-249688P

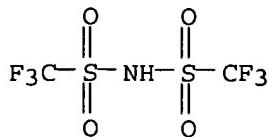
P 20001117

AB A new sandwich cathode design has a first cathode active material of a relatively low energy d. but of a relatively high rate capacity sandwiched between 2 current collectors and with a second cathode active material having a relatively high energy d. but of a relatively low rate capability in contact with the opposite sides of the 2 current collectors. The cathode design is relatively safer under short circuit and abuse conditions than the cells having a cathode material of a relatively high energy d. but a relatively low rate capability alone. A preferred cathode is: CFx/current collector/SVO/current collector/CFx. The SVO provides the discharge end of life indication since CFx and SVO cathode cells discharge under different voltage profiles. This is useful as an end-of-replacement indicator for an implantable medical device, such as cardiac pacemaker.

IT 90076-65-6

RL: TEM (Technical or engineered material use); USES (Uses)
(sandwich cathode design for alkali metal electrochem. cells having circuit safety characteristics)

RN 90076-65-6 CAPLUS
CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME)



● Li

L14 ANSWER 94 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2002:285182 CAPLUS

DN 137:223266

TI Redox reactions in some non-chloroaluminate room temperature molten salt systems

AU Katayama, Yasushi; Miura, Takashi

CS Fac. Sci. Technol., Keio Univ., Japan

SO Yoyuen oyobi Koon Kagaku (2002), 45(1), 61-72
CODEN: YKKAEG; ISSN: 0916-1589

PB Denki Kagakkai Yoyuen Iinkai

DT Journal; General Review

LA Japanese

AB A review. Redox reactions in some nonchloroaluminate room temperature molten salt systems were introduced briefly. In 1-ethyl-3-methylimidazolium chloride (EMICl) - iron chlorides (FeCl₂ and/or FeCl₃) molten salt systems, the redox reaction between trivalent and divalent iron species were studied with the aim of constructing a redox battery using the molten salt. The reduction of hexafluorosilicate was examined in both (EMI)₂SiF₆ molten salt and EMITFSI molten salt (TFSI = bis(trifluoromethanesulfonyl)imide) containing (EMI)₂SiF₆ with the object of electrodeposition of silicon at low temperature. The electrochem. behavior of some transition metals, silver, iron and titanium was studied in EMIBF₄ molten salt. In some TFSI--based molten salt systems, the electrochem. study on silver and ferrocene was described for using Ag/Ag(I) couple as a reference electrode reaction in these systems.

IT 174899-82-2

RL: NUU (Other use, unclassified); PRP (Properties); USES (Uses)
(Si electrodeposition in ethylmethyimidazolium hexafluorosilicate melt
and ethylmethyimidazolium bis(trifluoromethanesulfonyl)imide melt
containing ethylmethyimidazolium hexafluorosilicate)

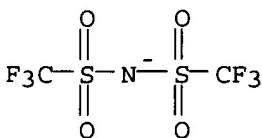
RN 174899-82-2 CAPLUS

CN 1H-Imidazolium, 1-ethyl-3-methyl-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

CM 1

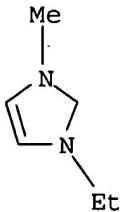
CRN 98837-98-0

CMF C2 F6 N O4 S2



CM 2

CRN 65039-03-4
CMF C6 H11 N2



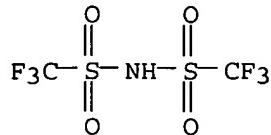
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

- L14 ANSWER 95 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2002:203196 CAPLUS
DN 136:402133
TI Main-chain viologen polymers with organic counterions exhibiting thermotropic liquid-crystalline and fluorescent properties
AU Bhowmik, Pradip K.; Han, Haesook; Cebe, James J.; Burchett, Ronald A.; Sarker, Ananda M.
CS Department of Chemistry, University of Nevada at Las Vegas, Las Vegas, NV, 89154, USA
SO Journal of Polymer Science, Part A: Polymer Chemistry (2002), 40(5), 659-674
CODEN: JPACCEC; ISSN: 0887-624X
PB John Wiley & Sons, Inc.
DT Journal
LA English
AB A series of viologen polymers with bromide, tosylate, and triflimide as counterions were prepared by either the Menshutkin reaction or metathesis reaction in a common organic solvent. Their polyelectrolyte behavior in methanol was determined by solution viscosity measurements, and their chemical structures were determined by Fourier-transform IR and Fourier-transform NMR spectroscopy. The polymers were characterized for their thermotropic liquid-crystalline properties using a number of exptl. techniques. Each of the viologen polymers with organic counterions had a low melting transition or fusion temperature above which it formed either a high-order smectic phase or a low-order smectic phase. Each of them also exhibited a smectic-to-isotropic transition. The ranges of the liquid-crystalline phase were 80°-88° for viologen polymers with tosylate as a counterion and 120°-146° for viologen polymers with triflimide as a counterion. They had excellent thermal stability. The ranges of thermal stability were 288°-329° for viologen polymers with tosylate as a counterion and 343°-350° for viologen polymers with triflimide as a counterion. The fluorescence property for all of the viologen polymers in either aqueous or methanol solution was also studied. For example, the viologen polymer containing the 4,4'-bipyridinium and p-xylyl units along the backbone of the polymer chain with triflimide as a counterion had an absorption spectrum ($\lambda_{max} = 265$ nm), an excitation spectrum (λ_{ex} values = 357, 443, and 454 with monitoring at 533 nm), and an emission spectrum ($\lambda_{em} = 536$ nm with excitation at 430 and 450 nm) in methanol.
IT 90076-65-6DP, Lithium triflimide, reaction products with 4,4'-bipyridine- α,α' -ditosylate xylene polymers
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (main-chain viologen polymers with bromide, tosylate and triflimide

counterions exhibiting thermotropic liquid-crystalline and fluorescent properties)

RN 90076-65-6 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME)



● Li

RE.CNT 67 THERE ARE 67 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 96 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2002:139857 CAPLUS

DN 136:386323

TI Protic acid catalyzed stereoselective glycosylation using glycosyl fluorides

AU Jona, Hideki; Mandai, Hiroki; Chavasiri, Warinthorn; Takeuchi, Kazuya; Mukaiyama, Teruaki

CS Department of Applied Chemistry, Faculty of Science, Science University of Tokyo, Tokyo, 162-8601, Japan

SO Bulletin of the Chemical Society of Japan (2002), 75(2), 291-309
CODEN: BCSJA8; ISSN: 0009-2673

PB Chemical Society of Japan

DT Journal

LA English

OS CASREACT 136:386323

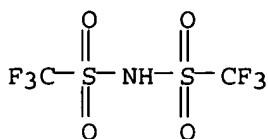
AB A catalytic and stereoselective glycosylation of various glycosyl acceptors, such as Me glycosides, thioglycosides, or a disarmed glycosyl fluoride, with benzyl-protected armed glycosyl fluoride was successfully carried out by using various protic acids in the presence of MS 5A. In the cases when trifluoromethanesulfonic acid (TfOH) or perchloric acid (HClO₄) was used in di-Et ether (Et₂O), α -glycosides were obtained as major products, while β -stereoselectivity was observed when tetrakis(pentafluorophenyl)boric acid [HB(C₆F₅)₄] was used in a mixed solvent of trifluoromethylbenzene (BTf)-pivalonitrile (tBuCN) = 5:1. Stereoselectivity of this glycosylation was controlled by the properties of counter anions of the catalyst as well as by those of solvents. Also, one-pot trisaccharide synthesis was performed by successive addition of NIS and third-sugar to afford Glc α or β 1-6Glc β 1-6Glc and Glc α or β 1-6GlcN β 1-6Glc in excellent yields.

IT 82113-65-3

RL: CAT (Catalyst use); USES (Uses)
(protic acid catalyzed stereoselective glycosylation using glycosyl fluorides as glycosyl acceptors)

RN 82113-65-3 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]- (9CI)
(CA INDEX NAME)



RE.CNT 100 THERE ARE 100 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 97 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2002:138923 CAPLUS
DN 136:183967
TI Process for manufacturing all-rac.- α -tocopherol in the presence of a bis(perfluoroalkanesulfonyl or pentafluorobenzenesulfonyl)imide catalyst
IN Bonrath, Werner; Haas, Alois; Hoppmann, Eike; Pauling, Horst
PA Roche Vitamins A.-G., Switz.
SO Eur. Pat. Appl., 10 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------------|----------|-----------------|-----------------|----------|
| PI | EP 1180517 | A1 | 20020220 | EP 2001-119322 | 20010810 |
| | EP 1180517 | B1 | 20030730 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO | | | | | |
| AT 246181 | E | 20030815 | EP 2000-117761 | A | 20000818 |
| ES 2204792 | T3 | 20040501 | AT 2001-119322 | | 20010810 |
| | | | EP 2000-117761 | A | 20000818 |
| CA 2354997 | AA | 20020218 | ES 2001-1119322 | | 20010810 |
| | | | EP 2000-117761 | A | 20000818 |
| BR 2001003412 | A | 20020326 | CA 2001-2354997 | | 20010813 |
| | | | EP 2000-117761 | A | 20000818 |
| JP 2002128775 | A2 | 20020509 | BR 2001-3412 | | 20010816 |
| | | | EP 2000-117761 | A | 20000818 |
| US 2002072619 | A1 | 20020613 | JP 2001-246843 | | 20010816 |
| US 6482961 | B2 | 20021119 | EP 2000-117761 | A | 20000818 |
| | | | US 2001-931663 | | 20010816 |
| CN 1339437 | A | 20020313 | EP 2000-117761 | A | 20000818 |
| | | | CN 2001-125595 | | 20010817 |
| | | | EP 2000-117761 | A | 20000818 |

OS CASREACT 136:183967; MARPAT 136:183967

AB A process, for the manufacture of all-racemic- α -tocopherol (I) via the acid-catalyzed condensation of trimethylhydroquinone with phytol or isophytol, is characterized by carrying out the condensation in the presence of a bis(perfluorohydrocarbyl)imide or a metal bis(perfluorohydrocarbyl)imide, [(R₁SO₂)₃N]_xR₂ [R₁ = perfluoroalkyl, C_nF_{2n+1}, pentafluorophenyl; R₂ = H, B, Mg, Al, Si, Sc, Ti, V, VO, Mn, Fe, Co, Ni, Cu, Zn, Y, Zr, Rh, Pd, Ag, Sn, La, Ce, Pr, Nd, Eu, Dy, Yb, Hf, Pt, Au; n = 1 - 10; x = valency of proton (1) or metal cation (1-4)], as a catalyst in an organic solvent. Thus, trimethylhydroquinone was suspended in PhMe and catalytic bis(pentafluoroethanesulfonyl)amine was added, after heating to 50-150°, isophytol was added over 20 mins., after 30 mins. more, the solvent is removed, giving 89.6% crude I.

IT 39847-37-5 39847-38-6 39847-39-7
39847-40-0 39847-41-1 152894-10-5
152894-12-7 213342-85-9 400608-35-7

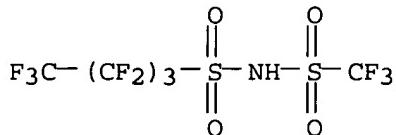
RL: CAT (Catalyst use); USES (Uses)

(process for manufacturing all-rac.- α -tocopherol by acid-catalyzed condensation of trimethylhydroquinone with phytol or isophytol in the

presence of a bis(perfluoroalkanesulfonyl or
pentafluorobenzenesulfonyl)imide catalyst)

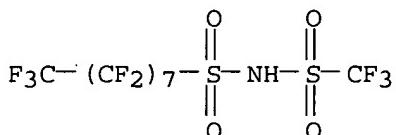
RN 39847-37-5 CAPLUS

CN 1-Butanesulfonamide, 1,1,2,2,3,3,4,4,4-nonafluoro-N-
[(trifluoromethyl)sulfonyl]- (9CI) (CA INDEX NAME)



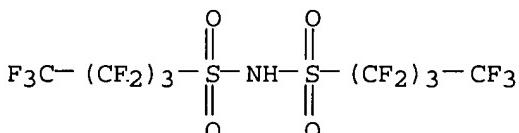
RN 39847-38-6 CAPLUS

CN 1-Octanesulfonamide, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8-heptadecafluoro-N-
[(trifluoromethyl)sulfonyl]- (9CI) (CA INDEX NAME)



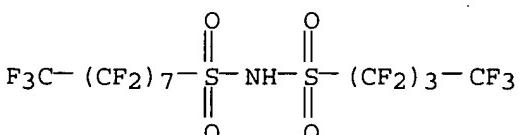
RN 39847-39-7 CAPLUS

CN 1-Butanesulfonamide, 1,1,2,2,3,3,4,4,4-nonafluoro-N-
[(nonafluorobutyl)sulfonyl]- (9CI) (CA INDEX NAME)



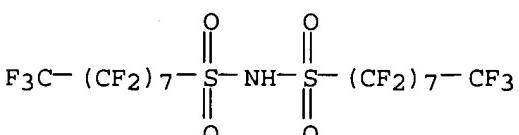
RN 39847-40-0 CAPLUS

CN 1-Octanesulfonamide, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8-heptadecafluoro-N-
[(nonafluorobutyl)sulfonyl]- (9CI) (CA INDEX NAME)



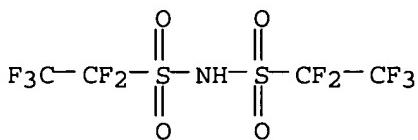
RN 39847-41-1 CAPLUS

CN 1-Octanesulfonamide, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8-heptadecafluoro-N-
[(heptadecafluoroctyl)sulfonyl]- (9CI) (CA INDEX NAME)



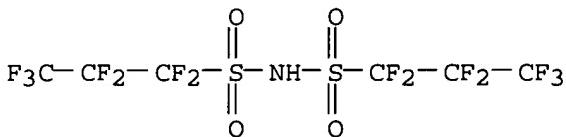
RN 152894-10-5 CAPLUS

CN Ethanesulfonamide, 1,1,2,2,2-pentafluoro-N-[(pentafluoroethyl)sulfonyl]-
(9CI) (CA INDEX NAME)



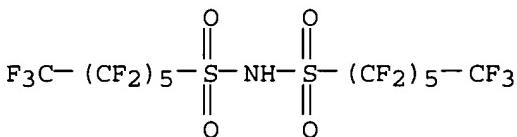
RN 152894-12-7 CAPLUS

CN 1-Propanesulfonamide, 1,1,2,2,3,3,3-heptafluoro-N-
[(heptafluoropropyl)sulfonyl]- (9CI) (CA INDEX NAME)



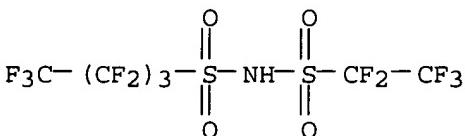
RN 213342-85-9 CAPLUS

CN 1-Hexanesulfonamide, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-N-
[(tridecafluorohexyl)sulfonyl]- (9CI) (CA INDEX NAME)



RN 400608-35-7 CAPLUS

CN 1-Butanesulfonamide, 1,1,2,2,3,3,4,4,4-nonafluoro-N-
[(pentafluoroethyl)sulfonyl]- (9CI) (CA INDEX NAME)



RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 98 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2002:103441 CAPLUS

DN 136:153869

TI Lithium-sulfur batteries with high capacity and good rate capability

IN Jung, Yongju; Kim, Seok; Choi, Yunsuk; Choi, Soo Seok; Lee, Jeawoan;
Hwang, Duck Chul; Kim, Joo Soak

PA Samsung SDI Co., Ltd., S. Korea

SO Eur. Pat. Appl., 10 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

PATENT NO.

KIND DATE

APPLICATION NO.

DATE

| PI | EP 1178555 | A2 | 20020206 | EP 2001-117788 | 20010802 |
|----|---|----|----------|--|--------------------------------------|
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | KR 2000-44900
KR 2000-44901 | A 20000802
A 20000802 |
| | KR 2002011562 | A | 20020209 | KR 2000-44900 | 20000802 |
| | KR 2002011563 | A | 20020209 | KR 2000-44901 | 20000802 |
| | JP 2002075446 | A2 | 20020315 | JP 2001-213286
KR 2000-44900
KR 2000-44901 | 20010713
A 20000802
A 20000802 |
| | US 2002045102 | A1 | 20020418 | US 2001-918463
KR 2000-44900
KR 2000-44901 | 20010801
A 20000802
A 20000802 |
| | CN 1336696 | A | 20020220 | CN 2001-132527
KR 2000-44900
KR 2000-44901 | 20010802
A 20000802
A 20000802 |

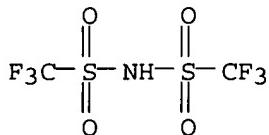
AB A lithium-sulfur battery includes a neg. electrode, a pos. electrode, and an electrolyte. The neg. electrode includes a neg. active material selected from materials in which lithium intercalation reversibly occur, lithium alloy or lithium metal. The pos. electrode includes at least one of elemental sulfur and organosulfur compds. for a pos. active material, and an elec. conductive material. The electrolyte includes at least two groups selected from a weak polar solvent group, a strong polar solvent group and a lithium protection solvent group, where the electrolyte includes at least one or more solvents selected from the same group. The electrolyte may optionally include one or more electrolyte salts.

IT 90076-65-6

RL: DEV (Device component use); USES (Uses)
(lithium-sulfur batteries with high capacity and good rate capability)

RN 90076-65-6 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME)



● Li

L14 ANSWER 99 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2001:933917 CAPLUS

DN 136:72256

TI Photoelectric transducer and photoelectric cell

IN Nakamura, Yoshisada; Tadakuma, Yoshio; Kagawa, Okimasa

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 26 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|----------------------------------|------------------------|
| JP 2001357896 | A2 | 20011226 | JP 2000-177211 | 20000613 |
| US 2002015881 | A1 | 20020207 | US 2001-879150
JP 2000-177211 | 20010613
A 20000613 |

US 2003205268

A1 20031106

US 2003-434206

20030509

JP 2000-177211

A 20000613

US 2001-879150

A3 20010613

AB The title photoelec. transducer is made of microparticle semiconductor used for photoelec. cell, and its sensitivity is improved by color pigments. The production of the transducer includes the process such as radiation by UV light of <400 nm, heating between 50-350°C, microwave radiation under reduced pressure of 0.05 MPa, exposing to high elec. or magnetic field, passing high elec. current, and exposing to O₃ under an oxidation or reduction atmospheric. The device has high photoelec. conversion efficiency and high energy recovery.

IT 174899-82-2 174899-83-3 210230-42-5
 223437-11-4 321881-77-0 321881-79-2
 321881-82-7 321881-94-1 324574-91-6
 324574-95-0 324575-10-2 384347-06-2
 384347-08-4 384347-09-5 384347-13-1
 384347-16-4 384347-19-7 384347-22-2
 384347-24-4 384347-27-7 384347-30-2
 384347-33-5 384347-35-7 384347-39-1
 384347-41-5 384347-45-9 384347-50-6
 384347-54-0 384347-58-4 384347-61-9
 384347-65-3 384347-66-4 384347-70-0
 384347-78-8 384347-82-4 384347-85-7

RL: DEV (Device component use); USES (Uses)
 (photoelec. transducer and photoelec. cell)

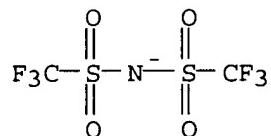
RN 174899-82-2 CAPLUS

CN 1H-Imidazolium, 1-ethyl-3-methyl-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 98837-98-0

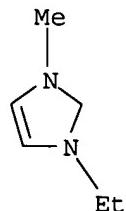
CMF C2 F6 N O4 S2



CM 2

CRN 65039-03-4

CMF C6 H11 N2



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 174899-83-3 CAPLUS

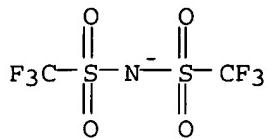
CN 1H-Imidazolium, 1-butyl-3-methyl-, salt with 1,1,1-trifluoro-N-

[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 98837-98-0

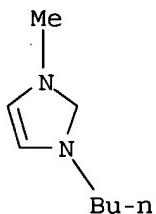
CMF C2 F6 N O4 S2



CM 2

CRN 80432-08-2

CMF C8 H15 N2



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

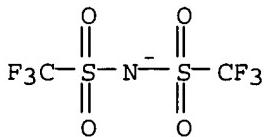
RN 210230-42-5 CAPLUS

CN 2-Propanaminium, N-ethyl-N-methyl-N-(1-methylethyl)-, salt with
1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1)
(9CI) (CA INDEX NAME)

CM 1

CRN 98837-98-0

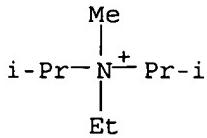
CMF C2 F6 N O4 S2



CM 2

CRN 68714-15-8

CMF C9 H22 N



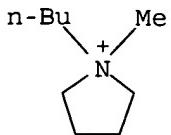
RN 223437-11-4 CAPLUS

CN Pyrrolidinium, 1-butyl-1-methyl-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 223437-10-3

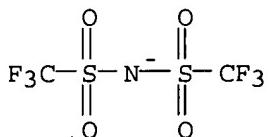
CMF C9 H20 N



CM 2

CRN 98837-98-0

CMF C2 F6 N O4 S2



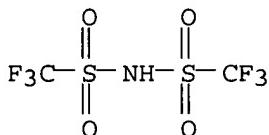
RN 321881-77-0 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, compd. with N''-ethyl-N,N,N',N'-tetramethylguanidine (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 82113-65-3

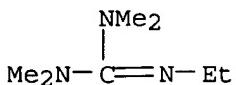
CMF C2 H F6 N O4 S2



CM 2

CRN 13439-88-8

CMF C7 H17 N3



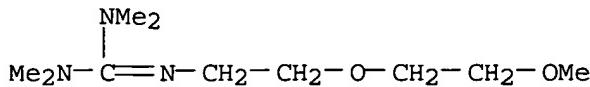
RN 321881-79-2 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, compd. with N''-[2-(2-methoxyethoxy)ethyl]-N,N,N',N'-methylguanidine (1:1) (9CI)

(CA INDEX NAME)

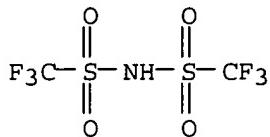
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CRN 321881-78-1
CMF C10 H23 N3 O2



CM 2

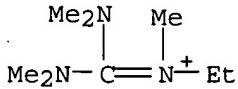
CRN 82113-65-3
CMF C2 H F6 N O4 S2



RN 321881-82-7 CAPLUS
CN Ethanaminium, N-[bis(dimethylamino)methylene]-N-methyl-, salt with
1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1)
(9CI) (CA INDEX NAME)

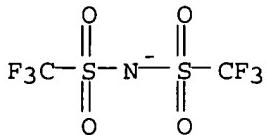
CM 1

CRN 321881-81-6
CMF C8 H20 N3



CM 2

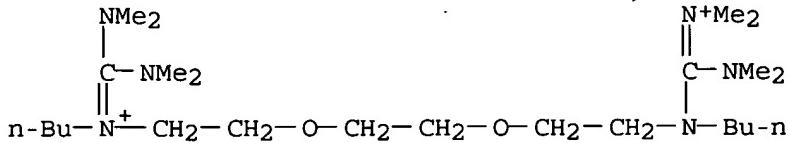
CRN 98837-98-0
CMF C2 F6 N O4 S2



RN 321881-94-1 CAPLUS
CN 7,10-Dioxa-4-aza-2-azoniadodec-2-en-12-aminium, N-[bis(dimethylamino)methylene]-N,4-dibutyl-3-(dimethylamino)-2-methyl-,
salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide
(1:2) (9CI) (CA INDEX NAME)

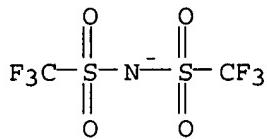
CM 1

CRN 321881-93-0
CMF C24 H54 N6 O2



CM 2

CRN 98837-98-0
CMF C2 F6 N O4 S2

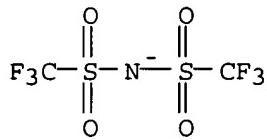


RN 324574-91-6 CAPLUS

CN 1-Butanaminium, N,N,N-triethyl-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

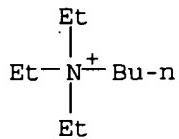
CM 1

CRN 98837-98-0
CMF C2 F6 N O4 S2



CM 2

CRN 23614-75-7
CMF C10 H24 N

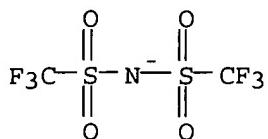


RN 324574-95-0 CAPLUS

CN Morpholinium, 4-butyl-4-methyl-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

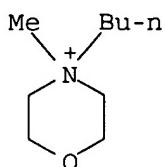
CM 1

CRN 98837-98-0
CMF C2 F6 N O4 S2



CM 2

CRN 82372-00-7
CMF C9 H20 N O

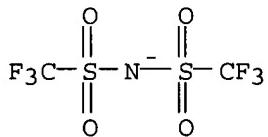


RN 324575-10-2 CAPLUS

CN Phosphonium, tributylmethyl-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

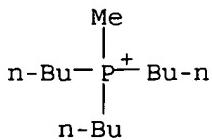
CM 1

CRN 98837-98-0
CMF C2 F6 N O4 S2



CM 2

CRN 34217-64-6
CMF C13 H30 P

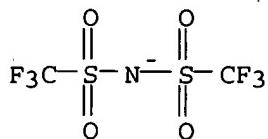


RN 384347-06-2 CAPLUS

CN Pyridinium, 1-octyl-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

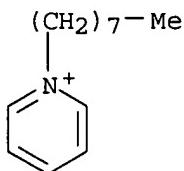
CM 1

CRN 98837-98-0
CMF C2 F6 N O4 S2



CM 2

CRN 34958-55-9
CMF C13 H22 N

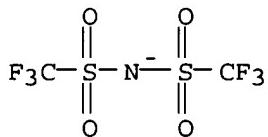


RN 384347-08-4 CAPLUS

CN Pyridinium, 1-dodecyl-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

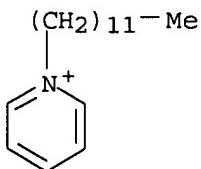
CM 1

CRN 98837-98-0
CMF C2 F6 N O4 S2



CM 2

CRN 15416-74-7
CMF C17 H30 N

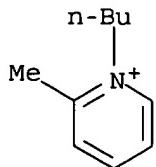


RN 384347-09-5 CAPLUS

CN Pyridinium, 1-butyl-2-methyl-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

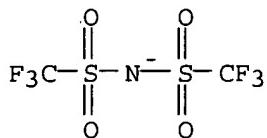
CM 1

CRN 125780-60-1
CMF C10 H16 N



CM 2

CRN 98837-98-0
CMF C2 F6 N O4 S2

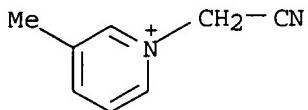


RN 384347-13-1 CAPLUS

CN Pyridinium, 1-(cyanomethyl)-3-methyl-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

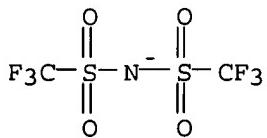
CM 1

CRN 384347-11-9
CMF C8 H9 N2



CM 2

CRN 98837-98-0
CMF C2 F6 N O4 S2

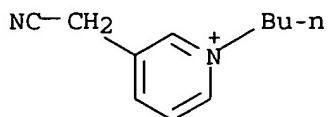


RN 384347-16-4 CAPLUS

CN Pyridinium, 1-butyl-3-(cyanomethyl)-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

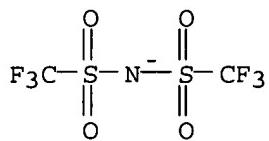
CM 1

CRN 384347-14-2
CMF C11 H15 N2



CM 2

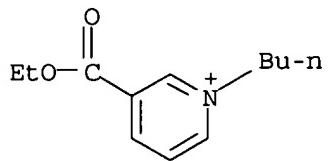
CRN 98837-98-0
CMF C2 F6 N O4 S2



RN 384347-19-7 CAPLUS
CN Pyridinium, 1-butyl-3-(ethoxycarbonyl)-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

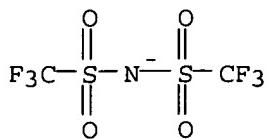
CM 1

CRN 384347-17-5
CMF C12 H18 N O2



CM 2

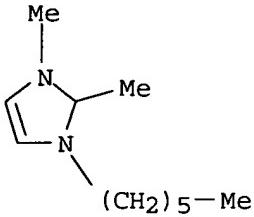
CRN 98837-98-0
CMF C2 F6 N O4 S2



RN 384347-22-2 CAPLUS
CN 1H-Imidazolium, 1-hexyl-2,3-dimethyl-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

CM 1

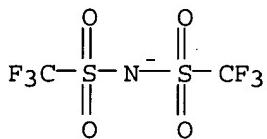
CRN 384347-20-0
CMF C11 H21 N2



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 98837-98-0
CMF C2 F6 N O4 S2

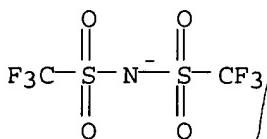


RN 384347-24-4 CAPLUS

CN 1H-Imidazolium, 1-ethenyl-3-methyl-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

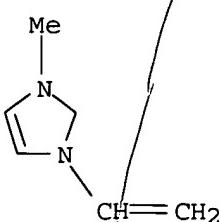
CM 1

CRN 98837-98-0
CMF C2 F6 N O4 S2



CM 2

CRN 45534-45-0
CMF C6 H9 N2



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

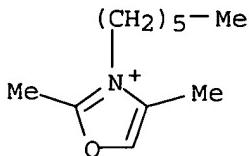
RN 384347-27-7 CAPLUS

CN Oxazolium, 3-hexyl-2,4-dimethyl-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 384347-25-5

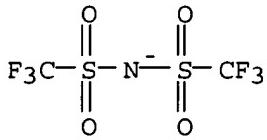
CMF C11 H20 N O



CM 2

CRN 98837-98-0

CMF C2 F6 N O4 S2



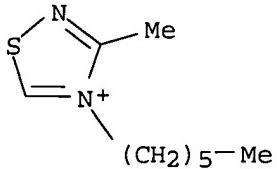
RN 384347-30-2 CAPLUS

CN 1,2,4-Thiadiazolium, 4-hexyl-3-methyl-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 384347-28-8

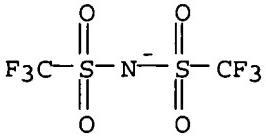
CMF C9 H17 N2 S



CM 2

CRN 98837-98-0

CMF C2 F6 N O4 S2



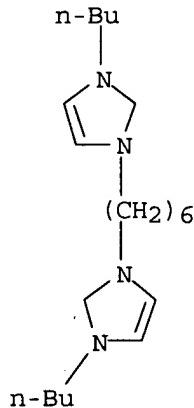
RN 384347-33-5 CAPLUS

CN 1H-Imidazolium, 1,1'-(1,6-hexanediyil)bis[3-butyl-, salt with
1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:2)
(9CI) (CA INDEX NAME)

CM 1

CRN 384347-31-3

CMF C20 H36 N4

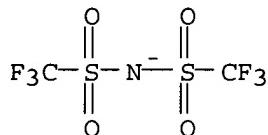


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 98837-98-0

CMF C2 F6 N O4 S2



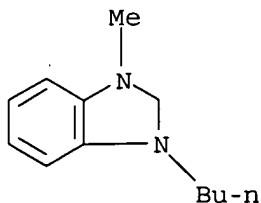
RN 384347-35-7 CAPLUS

CN 1H-Benzimidazolium, 1-butyl-3-methyl-, salt with 1,1,1-trifluoro-N-
[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 108427-56-1

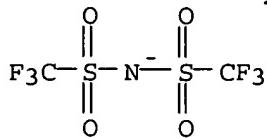
CMF C12 H17 N2



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

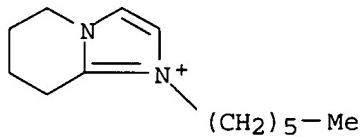
CRN 98837-98-0
CMF C2 F6 N O4 S2



RN 384347-39-1 CAPLUS
CN Imidazo[1,2-a]pyridinium, 1-hexyl-5,6,7,8-tetrahydro-, salt with
1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1)
(9CI) (CA INDEX NAME)

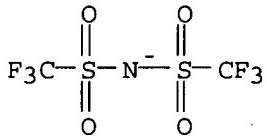
CM 1

CRN 384347-37-9
CMF C13 H23 N2



CM 2

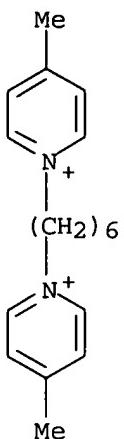
CRN 98837-98-0
CMF C2 F6 N O4 S2



RN 384347-41-5 CAPLUS
CN Pyridinium, 1,1'-(1,6-hexanediyi)bis[4-methyl-, salt with
1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:2)
(9CI) (CA INDEX NAME)

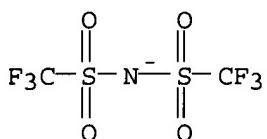
CM 1

CRN 114958-05-3
CMF C18 H26 N2



CM 2

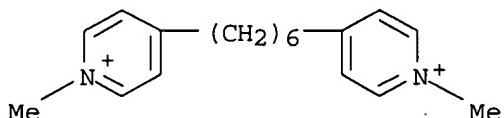
CRN 98837-98-0
CMF C2 F6 N O4 S2



RN 384347-45-9 CAPLUS
CN Pyridinium, 4,4'-(1,6-hexanediyil)bis[1-methyl-, salt with
1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:2)
(9CI) (CA INDEX NAME)

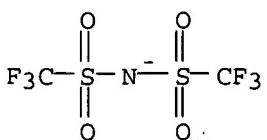
CM 1

CRN 384347-43-7
CMF C18 H26 N2



CM 2

CRN 98837-98-0
CMF C2 F6 N O4 S2

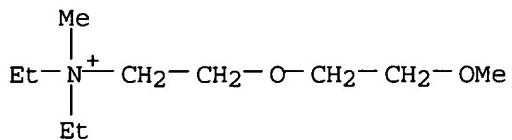


RN 384347-50-6 CAPLUS

CN Ethanaminium, N,N-diethyl-2-(2-methoxyethoxy)-N-methyl-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

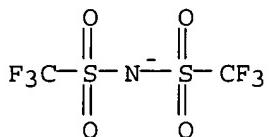
CM 1

CRN 384347-48-2
CMF C10 H24 N O2



CM 2

CRN 98837-98-0
CMF C2 F6 N O4 S2

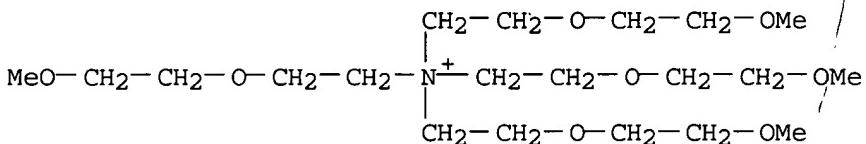


RN 384347-54-0 CAPLUS

CN Ethanaminium, 2-(2-methoxyethoxy)-N,N,N-tris[2-(2-methoxyethoxy)ethyl]-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

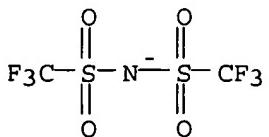
CM 1

CRN 384347-52-8
CMF C20 H44 N O8



CM 2

CRN 98837-98-0
CMF C2 F6 N O4 S2



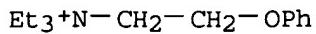
RN 384347-58-4 CAPLUS

CN Ethanaminium, N,N,N-triethyl-2-phenoxy-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 384347-56-2

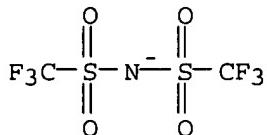
CMF C14 H24 N O



CM 2

CRN 98837-98-0

CMF C2 F6 N O4 S2

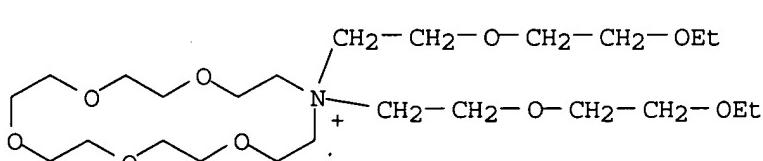


RN 384347-61-9 CAPLUS

CN 1,4,7,10,13-Pentaoxa-16-azoniacyclooctadecane, 16,16-bis[2-(2-

CETOXY

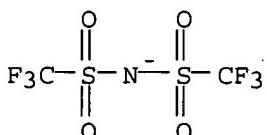
CM 1



CM 2

CRN 98837-98-0

CRA 58857 58 0
CME C2 E6 N 04 S2

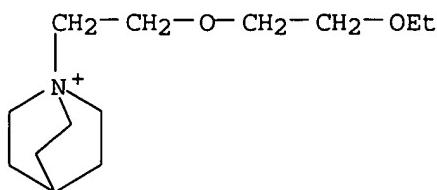


RN 384347-65-3 CAPLUS

CN 1-Azoniabicyclo[2.2.2]octane, 1-[2-(2-ethoxyethoxy)ethyl]-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

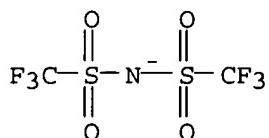
CM 1

CRN 384347-63-1
CMF C13 H26 N 02



CM 2

CRN 98837-98-0
CMF C2 F6 N 04 S2

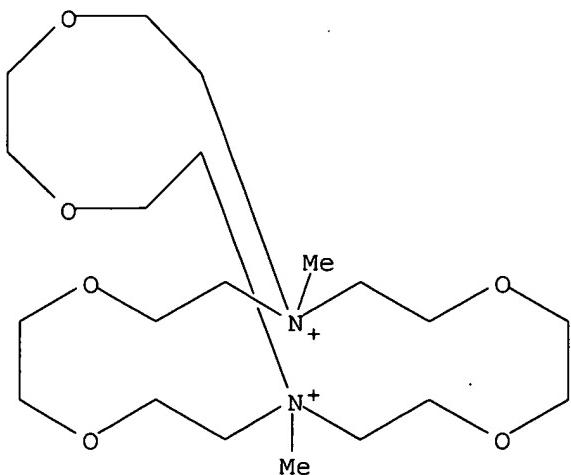


RN 384347-66-4 CAPLUS

CN 4,7,13,16,21,24-Hexaoxa-1,10-diazoniabicyclo[8.8.8]hexacosane,
1,10-dimethyl-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:2) (9CI) (CA INDEX NAME)

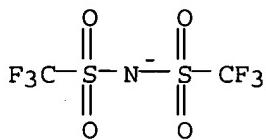
CM 1

CRN 324575-07-7
CMF C20 H42 N2 O6



CM 2

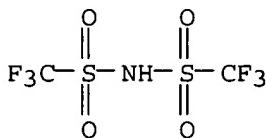
CRN 98837-98-0
CMF C2 F6 N O4 S2



RN 384347-70-0 CAPLUS
CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, compd.
with N''-butyl-N,N,N',N'-tetramethylguanidine (1:1) (9CI) (CA INDEX NAME)

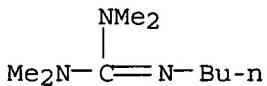
CM 1

CRN 82113-65-3
CMF C2 H F6 N O4 S2



CM 2

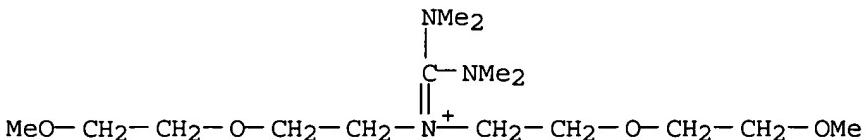
CRN 27931-45-9
CMF C9 H21 N3



RN 384347-78-8 CAPLUS
CN Ethanaminium, N-[bis(dimethylamino)methylene]-2-(2-methoxyethoxy)-N-[2-(2-methoxyethoxy)ethyl]-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

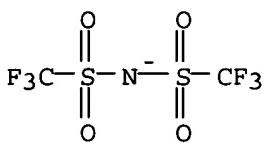
CM 1

CRN 384347-77-7
CMF C15 H34 N3 O4



CM 2

CRN 98837-98-0
CMF C2 F6 N O4 S2



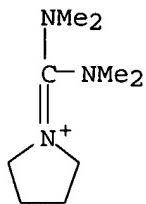
RN 384347-82-4 CAPLUS

CN Pyrrolidinium, 1-[bis(dimethylamino)methylene]-, salt with
1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1)
(9CI) (CA INDEX NAME)

CM 1

CRN 384347-81-3

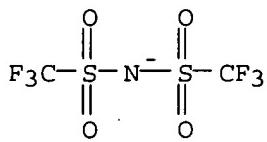
CMF C9 H20 N3



CM 2

CRN 98837-98-0

CMF C2 F6 N O4 S2



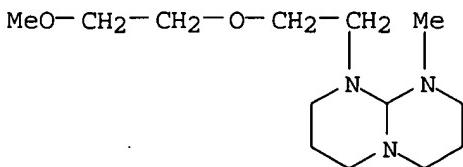
RN 384347-85-7 CAPLUS

CN 2H-Pyrimido[1,2-a]pyrimidinium, 3,4,6,7,8,9-hexahydro-1-[2-(2-methoxyethoxy)ethyl]-9-methyl-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 321881-91-8

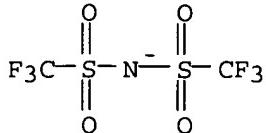
CMF C13 H26 N3 O2



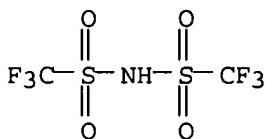
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 98837-98-0
CMF C2 F6 N O4 S2



L14 ANSWER 100 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2001:853930 CAPLUS
DN 136:217306
TI Electronic structure and charge transport mechanism in poly[1,4-bis(pyrrol-2-yl)phenylene]
AU Larmat, Fernando; Soloducho, Jadwiga; Katritzky, Alan R.; Reynolds, John R.
CS Departamento de Quimica, Universidad del Valle, Cali, 25360, Colombia
SO Synthetic Metals (2001), 124(2-3), 329-336
CODEN: SYMEDZ; ISSN: 0379-6779
PB Elsevier Science S.A.
DT Journal
LA English
AB The electrochem. and electronic properties, as well as the redox induced ion and charge transport mechanism in poly[1,4-bis(pyrrol-2-yl)phenylene] (PBPyp), have been studied by electrochem., optical and ESR (ESR) spectroscopies, along with electrogravimetric techniques. PBPyp films are obtained by electropolymerization in several solvent/electrolyte systems. Due to the electron-rich and three-ring nature of 1,4-bis(pyrrol-2-yl)benzene (BPyB), polymerization occurs at low potentials (ca. 0.3 V vs. Ag/Ag⁺), and the resulting polymers are stable to multiple redox switching. The ESR and optical spectra of the polymer are consistent with the sequential formation of cation-radical and diamagnetic charge-carriers during the doping process. These results fit the classical polaron/bipolaron model, though the presence of π-dimers cannot be ruled out. The evolution of the ESR signal during gradual oxidation of the polymer indicates that radical-cations (polarons) are intermediates in the redox mechanism even though the individual redox processes from neutral to polaron and from polaron to bipolaron cannot be observed in the cyclic voltammograms of the polymer. Electrogravimetric studies using the electrochem. quartz microbalance (ECQM) combined with conductance spectra indicates that the electrolyte anions are the dominant mobile species during the redox switching of the polymer.
IT 90076-65-6, Lithium triflimide
RL: NUU (Other use, unclassified); USES (Uses)
(electronic structure and charge transport mechanism in poly[1,4-bis(pyrrol-2-yl)phenylene])
RN 90076-65-6 CAPLUS
CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME)



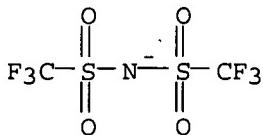
● Li

RE.CNT 80 THERE ARE 80 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 101 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2001:851985 CAPLUS
 DN 136:125429
 TI Preparation of a novel fluorosilicate salt for electrodeposition of silicon at low temperature
 AU Katayama, Yasushi; Yokomizo, Masakazu; Miura, Takashi; Kishi, Tomiya
 CS Department of Applied Chemistry, Faculty of Science and Technology, Keio University, Kohoku-ku, Yokohama, 223-8522, Japan
 SO Electrochemistry (Tokyo, Japan) (2001), 69(11), 834-836
 CODEN: EECTFA; ISSN: 1344-3542
 PB Electrochemical Society of Japan
 DT Journal
 LA English
 AB A novel fluorosilicate salt, 1-ethyl-3-methylimidazolium hexafluorosilicate ((EMI)₂SiF₆), was prepared by the reaction of EMICI and hexafluorosilicic acid aqueous solution. A transparent thin film containing silicon was deposited on a silver electrode by potentiostatic electrolysis in molten (EMI)₂SiF₆, at 90°C. The film was reactive against water to form silicon dioxide. (EMI)₂SiF₆ was found to dissolve in 1-ethyl-3-methylimidazolium bis(trifluoromethanesulfone)imide (EMITFSI) room temperature molten salt. The same thin film was also obtained on a silver electrode by potentiostatic electrolysis in EMITFSI containing (EMI)₂SiF₆ at room temperature
 IT 174899-82-2, 1-Ethyl-3-methylimidazolium bis(trifluoromethylsulfonyl)imide
 RL: NUU (Other use, unclassified); USES (Uses)
 (dissoln. of 1-ethyl-3-methylimidazolium hexafluorosilicate in)
 RN 174899-82-2 CAPLUS
 CN 1H-Imidazolium, 1-ethyl-3-methyl-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

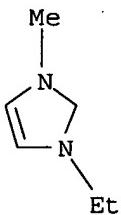
CM 1

CRN 98837-98-0
 CMF C2 F6 N O4 S2



CM 2

CRN 65039-03-4



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

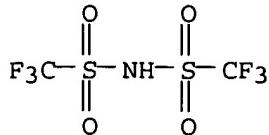
L14 ANSWER 102 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2001:850852 CAPLUS
 DN 135:360260
 TI Efficient lithium battery cell stack for cells with double screen sandwich cathodes
 IN Gan, Hong
 PA Wilson Greatbatch Ltd., USA
 SO Eur. Pat. Appl., 11 pp.
 CODEN: EPXXDW
 DT Patent
 LA English
 FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|--|------|----------|-----------------|------------|
| PI | EP 1156544 | A2 | 20011121 | EP 2001-304355 | 20010516 |
| | EP 1156544 | A3 | 20030507 | | |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO | | | | |
| | US 2001049032 | A1 | 20011206 | US 2000-204477P | P 20000516 |
| | US 6645670 | B2 | 20031111 | US 2001-845875 | 20010430 |
| | CA 2346601 | AA | 20011116 | US 2000-204477P | P 20000516 |
| | CA 2346601 | C | 20011116 | CA 2001-2346601 | 20010508 |
| | JP 2002015725 | A2 | 20020118 | US 2000-204477P | P 20000516 |
| | | | | JP 2001-145724 | 20010516 |
| | | | | US 2000-204477P | P 20000516 |

AB The present invention improves the performance of lithium electrochem. cells by providing a new electrode assembly based on a sandwich cathode design, but termed a double screen sandwich cathode electrode design. In particular, the present invention uses sandwich cathode electrodes which are, in turn, sandwiched between two half double screen sandwich cathode electrodes, either in a prismatic plate or serpentine-like electrode assembly. In a jelly roll electrode assembly, the cell is provided in a case-pos. design and the outside round of the electrode assembly is a half double screen sandwich cathode electrode.

IT 90076-65-6
 RL: DEV (Device component use); USES (Uses)
 (efficient lithium battery cell stack for cells with double screen sandwich cathodes)

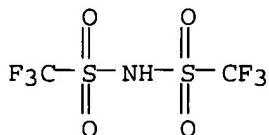
RN 90076-65-6 CAPLUS
 CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME)



● Li

L14 ANSWER 103 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2001:850850 CAPLUS
 DN 135:360258
 TI Control of battery swelling by the proper choice of carbon monofluoride cathode materials in high rate defibrillator cells
 IN Gan, Hong; Smesko, Sally Ann; Takeuchi, Esther S.; Davis, Steven M.
 PA Wilson Greatbatch Ltd., USA
 SO Eur. Pat. Appl., 12 pp.
 CODEN: EPXXDW
 DT Patent
 LA English
 FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|--|------|----------|-----------------|------------|
| PI | EP 1156541 | A2 | 20011121 | EP 2001-112257 | 20010518 |
| | EP 1156541 | A3 | 20030326 | | |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO | | | | |
| | US 2002012844 | A1 | 20020131 | US 2000-205361P | P 20000518 |
| | US 6783888 | B2 | 20040831 | US 2001-859558 | 20010517 |
| | JP 2002100361 | A2 | 20020405 | US 2000-205361P | P 20000518 |
| | | | | JP 2001-188868 | 20010517 |
| | | | | US 2000-205361P | P 20000518 |
| | CA 2348175 | AA | 20011118 | CA 2001-2348175 | 20010518 |
| | | | | US 2000-205361P | P 20000518 |
| AB | The minimization or elimination of swelling in lithium cells containing CFx as part of the cathode and discharged under high rate applications is disclosed. When CFx materials are synthesized from fibrous carbonaceous materials, in comparison to petroleum coke, cell swelling is greatly reduced, and in some cases eliminated. Preferred precursors are carbon fibers and MCMB. | | | | |
| IT | 90076-65-6 | | | | |
| | RL: DEV (Device component use); USES (Uses) | | | | |
| | (control of battery swelling by proper choice of carbon monofluoride cathode materials in high rate defibrillator cells) | | | | |
| RN | 90076-65-6 CAPLUS | | | | |
| CN | Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME) | | | | |



● Li

L14 ANSWER 104 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2001:817214 CAPLUS
 DN 135:346942
 TI Electrochemical cell having multiplate electrodes with differing discharge rate regions
 IN Spillman, David M.; Takeuchi, Esther S.
 PA Wilson Greatbatch Ltd., USA
 SO U.S. Pat. Appl. Publ., 10 pp., Cont.-in-part of Ser. No. US 1999-247347,
 filed on 10 Feb 1999, now
 CODEN: USXXCO
 DT Patent
 LA English
 FAN.CNT 3

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---------------|------|----------|---|---|
| PI | US 2001038943 | A1 | 20011108 | US 2001-848457 | 20010503 |
| | US 6677077 | B2 | 20040113 | US 1997-832803
US 1999-247347 | A3 19970404
A2 19990210 |
| | US 5935724 | A | 19990810 | US 1997-832803 | 19970404 |
| | US 2005054683 | A1 | 20050310 | US 2003-470575
US 1995-3149P
US 1996-696313
US 1999-247347
US 2000-518701 | 20030322
P 19950901
A3 19960813
A1 19990210
B1 20000303 |

PATENT FAMILY INFORMATION:

FAN 1997:302929

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|---|----------|----------|----------------------------------|--------------------------|
| PI | WO 9709328 | A1 | 19970313 | WO 1996-US12766 | 19960813 |
| | W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | US 1995-3149P | P 19950901 |
| RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA | | | | CA 1996-2228647 | 19960813 |
| CA 2228647 | AA | 19970313 | | US 1995-3149P | P 19950901 |
| AU 9667181 | A1 | 19970327 | | AU 1996-67181 | 19960813 |
| AU 716493 | B2 | 20000224 | | US 1995-3149P
WO 1996-US12766 | P 19950901
W 19960813 |
| EP 856002 | A1 | 19980805 | | EP 1996-927316 | 19960813 |
| EP 856002 | B1 | 20011024 | | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI | | | | US 1995-3149P | P 19950901 |
| CN 1197457 | A | 19981028 | | WO 1996-US12766 | W 19960813 |
| CN 1072222 | B | 20011003 | | CN 1996-197155 | 19960813 |
| BR 9610474 | A | 19990302 | | US 1995-3149P | P 19950901 |
| US 1995-3149P | | | | BR 1996-10474 | 19960813 |
| JP 11512386 | T2 | 19991026 | | US 1995-3149P | P 19950901 |
| JP 1996-511190 | | | | WO 1996-US12766 | W 19960813 |
| US 1995-3149P | | | | JP 1996-511190 | 19960813 |
| NZ 315469 | A | 20000128 | | US 1995-3149P | P 19950901 |
| US 1995-3149P | | | | WO 1996-US12766 | W 19960813 |

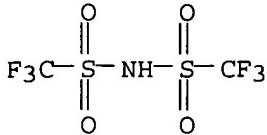
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|---------------|----|----------|------------------|-------------|
| RU 2175324 | C2 | 20011027 | RU 1998-105678 | 19960813 |
| | | | US 1995-3149P | P 19950901 |
| | | | WO 1996-US12766 | W 19960813 |
| AT 207487 | E | 20011115 | AT 1996-927316 | 19960813 |
| | | | US 1995-3149P | P 19950901 |
| | | | WO 1996-US12766 | W 19960813 |
| ES 2165516 | T3 | 20020316 | ES 1996-927316 | 19960813 |
| | | | US 1995-3149P | P 19950901 |
| SK 283487 | B6 | 20030805 | SK 1998-195 | 19960813 |
| | | | US 1995-3149P | P 19950901 |
| PL 186524 | B1 | 20040130 | WO 1996-US12766 | W 19960813 |
| | | | PL 1996-325152 | 19960813 |
| | | | US 1995-3149P | P 19950901 |
| ZA 9606935 | A | 19980216 | WO 1996-US12766 | W 19960813 |
| | | | ZA 1996-6935 | 19960815 |
| | | | US 1995-3149P | P 19950901 |
| TW 419468 | B | 20010121 | TW 1996-85110539 | 19960829 |
| | | | US 1995-3149P | P 19950901 |
| FI 9800452 | A | 19980227 | FI 1998-452 | 19980227 |
| | | | US 1995-3149P | P 19950901 |
| | | | WO 1996-US12766 | W 19960813 |
| NO 9800855 | A | 19980430 | NO 1998-855 | 19980227 |
| NO 311520 | B1 | 20011203 | | |
| | | | US 1995-3149P | P 19950901 |
| | | | WO 1996-US12766 | W 19960813 |
| US 6166056 | A | 20001226 | US 1998-138205 | 19980824 |
| | | | US 1995-3149P | P 19950901 |
| | | | US 1996-696313 | A3 19960813 |
| HK 1014946 | A1 | 20020301 | HK 1999-100058 | 19990107 |
| | | | US 1995-3149P | P 19950901 |
| | | | WO 1996-US12766 | W 19960813 |
| US 6051716 | A | 20000418 | US 1999-247346 | 19990210 |
| | | | US 1995-3149P | P 19950901 |
| | | | US 1996-696313 | A3 19960813 |
| US 6043266 | A | 20000328 | US 1999-313468 | 19990517 |
| | | | US 1995-3149P | P 19950901 |
| | | | US 1996-696313 | A3 19960813 |
| US 6313307 | B1 | 20011106 | US 2000-518788 | 20000303 |
| | | | US 1995-3149P | P 19950901 |
| | | | US 1996-696313 | A3 19960813 |
| US 6358942 | B1 | 20020319 | US 2000-713670 | 20001115 |
| | | | US 1995-3149P | P 19950901 |
| | | | US 1996-696313 | A3 19960813 |
| | | | US 1998-138205 | A3 19980824 |
| US 2005054683 | A1 | 20050310 | US 2003-470575 | 20030322 |
| | | | US 1995-3149P | P 19950901 |
| | | | US 1996-696313 | A3 19960813 |
| | | | US 1999-247347 | A1 19990210 |
| | | | US 2000-518701 | B1 20000303 |

| PAN | 1999-502757 | KIND | DATE | APPLICATION NO. | DATE |
|-------|---------------|-------|----------|-----------------|-------------|
| | PATENT NO. | | | | |
| ----- | ----- | ----- | ----- | ----- | ----- |
| PI | US 5935724 | A | 19990810 | US 1997-832803 | 19970404 |
| | US 5968962 | A | 19991019 | US 1996-696313 | 19960813 |
| | US 2001038943 | A1 | 20011108 | US 2001-848457 | 20010503 |
| | US 6677077 | B2 | 20040113 | | |
| | | | | US 1997-832803 | A3 19970404 |
| | | | | US 1999-247347 | A2 19990210 |

AB An electrochem. cell comprises a medium rate electrode region intended to be discharged under a substantially constant drain and a high rate electrode region intended to be pulse discharged. Both electrode regions share a common anode and are activated with the same electrolyte.

IT 90076-65-6

RL: DEV (Device component use); USES (Uses)
 (electrochem. cell having multiplate electrodes with differing
 discharge rate regions)
 RN 90076-65-6 CAPLUS
 CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-,
 lithium salt (9CI) (CA INDEX NAME)

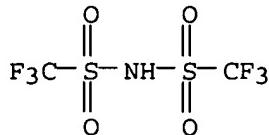


● Li

RE.CNT 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 105 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2001:796401 CAPLUS
 DN 135:346862
 TI Sandwich cathode design for alkali metal electrochemical cell with high
 discharge rate capability
 IN Gan, Hong
 PA Wilson Greatbatch Limited, USA
 SO Eur. Pat. Appl., 19 pp.
 CODEN: EPXXDW
 DT Patent
 LA English
 FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|------------|
| PI EP 1150366 | A2 | 20011031 | EP 2001-303866 | 20010427 |
| EP 1150366 | A3 | 20021127 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO | | | | |
| US 6551747 | B1 | 20030422 | US 2000-560060 | A 20000427 |
| CA 2345518 | AA | 20011027 | CA 2001-2345518 | 20010426 |
| | | | US 2000-560060 | A 20000427 |
| JP 2002008671 | A2 | 20020111 | JP 2001-131964 | 20010427 |
| | | | US 2000-560060 | A 20000427 |
| AB A new sandwich cathode design having a first cathode active material of a
relatively high energy d. but of a relatively low rate capability
sandwiched between two current collectors and with a second cathode active
material having a relatively low energy d. but of a relatively high rate
capability in contact with the opposite sides of the two current
collectors, is disclosed. The present cathode design is useful for
powering an implantable medical device requiring a high rate discharge
application. | | | | |
| IT 90076-65-6 | | | | |
| RL: DEV (Device component use); USES (Uses)
(sandwich cathode design for alkali metal electrochem. cell with high
discharge rate capability) | | | | |
| RN 90076-65-6 CAPLUS | | | | |
| CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-,
lithium salt (9CI) (CA INDEX NAME) | | | | |



● Li

L14 ANSWER 106 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2001:759629 CAPLUS

DN 135:306243

TI Method for preparation of a low surface area, single phase mixed metal oxide cathode active material for an alkali metal electrochemical cell

IN Takeuchi, Esther S.; Leising, Randolph A.

PA Wilson Greatbatch Ltd., USA

SO Eur. Pat. Appl., 21 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|--|------|----------|-----------------|------------|
| PI | EP 1146581 | A2 | 20011017 | EP 2001-303469 | 20010412 |
| | EP 1146581 | A3 | 20030115 | | |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO | | | US 2000-549910 | A 20000414 |
| | US 6566007 | B1 | 20030520 | US 2000-549910 | 20000414 |
| | JP 2001351631 | A2 | 20011221 | JP 2001-113703 | 20010412 |
| | | | | US 2000-549910 | A 20000414 |

AB A single phase silver vanadium oxide prepared from a mixture of a decomposable silver salt and vanadium oxide first heated at about 2° to about 40° above the decomposition temperature of the mixture followed by a second heating in a temperature range of about 490° to about 520° is disclosed. The silver vanadium oxide material is coupled with a lithium anode and activated with a nonaqueous electrolyte to provide an improved high energy d. electrochem. cell having increased pulse voltages and a reduction in voltage delay.

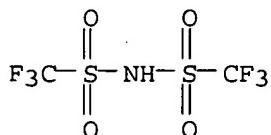
IT 90076-65-6

RL: DEV (Device component use); USES (Uses)

(method for preparation of low surface area, single phase mixed metal oxide cathode active material for alkali metal electrochem. cell)

RN 90076-65-6 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME)



● Li

L14 ANSWER 107 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2001:747277 CAPLUS

DN 135:291387

TI Application of γ - silver vanadium oxide and mixture of γ - silver vanadium oxide/ ϵ - silver vanadium oxide in high rate electrochemical lithium batteries containing silver vanadium oxide/CFx/silver vanadium oxide sandwich cathodes

IN Gan, Hong; Takeuchi, Esther S.

PA Wilson Greatbatch Ltd., USA

SO Eur. Pat. Appl., 16 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 2

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---------------|------|----------|--|------------|
| PI | EP 1143544 | A2 | 20011010 | EP 2001-303236 | 20010405 |
| | EP 1143544 | A3 | 20021113 | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO | |
| | JP 2001313028 | A2 | 20011109 | US 2000-194840P | P 20000405 |
| | | | | JP 2001-92912 | 20010328 |
| | | | | US 2000-194840P | P 20000405 |

PATENT FAMILY INFORMATION:

FAN 2003:874848

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---------------|------|----------|-----------------|-------------|
| PI | US 2003207168 | A1 | 20031106 | US 2003-435232 | 20030509 |
| | | | | US 2000-194840P | P 20000405 |
| | | | | US 2001-809404 | A2 20010315 |
| | US 2001044047 | A1 | 20011122 | US 2001-809404 | 20010315 |
| | US 6607861 | B2 | 20030819 | US 2000-194840P | P 20000405 |

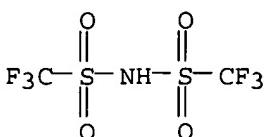
AB Lithium electrochem. cells having a sandwich cathode electrode of SVO/CFx/SVO active materials are described. Such a design improves the service life of defibrillator electrochem. cells. A preferred formulation uses γ -SVO/CFx/ γ -SVO or (γ & ϵ)-SVO/CFx/(γ & ϵ)-SVO sandwiched cathode electrodes.

IT 90076-65-6

RL: DEV (Device component use); USES (Uses)
(application of γ - silver vanadium oxide and mixture of γ - silver vanadium oxide/ ϵ - silver vanadium oxide in high rate electrochem. lithium batteries containing silver vanadium oxide/CFx/silver vanadium oxide sandwich cathodes)

RN 90076-65-6 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME)



● Li

L14 ANSWER 108 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2001:615636 CAPLUS
DN 135:168872
TI Electrochemical battery for conversion of low rate energy into high rate energy by parallel discharging
IN Gan, Hong; Takeuchi, Esther S.
PA Wilson Greatbatch Ltd., USA
SO Eur. Pat. Appl., 15 pp.
CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---------------|------|----------|--|------------|
| PI | EP 1126539 | A2 | 20010822 | EP 2001-301379 | 20010216 |
| | EP 1126539 | A3 | 20020918 | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO | |
| | US 2001033953 | A1 | 20011025 | US 2000-183010P | P 20000216 |
| | US 6627337 | B2 | 20030930 | US 2001-781830 | 20010212 |
| | JP 2001273912 | A2 | 20011005 | US 2000-183010P | P 20000216 |
| | | | | JP 2001-40660 | 20010216 |
| | | | | US 2000-183010P | P 20000216 |

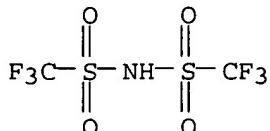
AB An electrode configuration for use in a defibrillator battery to improve the battery capacity and its utilization efficiency by using a combination SVO cell and a CFx cell discharged in parallel, is disclosed. In other words, the anode of the SVO cell is connected to the anode of the CFx cell and the cathode of the SVO cell is connected to the cathode of the CFx cell. The SVO cell provides a relatively high discharge rate while the CFx cell results in long service life. This results in 100% of the usable capacity from both cells being utilized.

IT 90076-65-6

RL: DEV (Device component use); USES (Uses)
(electrochem. battery for conversion of low rate energy into high rate energy by parallel discharging)

RN 90076-65-6 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME)



● Li

L14 ANSWER 109 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2001:537410 CAPLUS
DN 135:109730
TI Alkali metal electrochemical cell activated with a nonaqueous electrolyte having a sulfate additive
IN Gan, Hong; Takeuchi, Esther S.
PA Wilson Greatbatch Ltd., USA
SO U.S., 13 pp., Cont.-in-part of U.S. 6,180,283.
CODEN: USXXAM
DT Patent

LA English

FAN.CNT 6

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|--|--|
| PI US 6265106 | B1 | 20010724 | US 2000-491355
US 1998-9557
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A2 19980120
A2 19991213 |
| US 6013394 | A | 20000111 | US 1998-9557 | 19980120 |
| US 6180283 | B1 | 20010130 | US 1999-460035
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20000818
A 19991213 |
| EP 1109244 | A2 | 20010620 | US 2000-491355
US 2000-519534 | A 20000126
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| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
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US 2000-491355
US 2000-519534 | A 19991213
A 20000126
A 20000306 |
| JP 2001176548 | A2 | 20010629 | JP 2000-378551
US 1999-460035
US 2000-491355 | 20001213
A 19991213
A 20000126 |
| TW 478201 | B | 20020301 | US 2000-519534
TW 2000-89126603
US 1999-460035 | A 20000306
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A 19991213 |
| | | | US 2000-491355
US 2000-519534 | A 20000126
A 20000306 |

PATENT FAMILY INFORMATION:

| FAN | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
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| PI | US 6013394 | A | 20000111 | US 1998-9557 | 19980120 |
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A2 19980120
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US 2001-772680 | A2 20000126
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US 1999-460035 | A2 19980120
A2 19991213 |
| FAN | 2001:73421 | | | | |
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A 20000306 |
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| EP 1109244 | A3 | 20020724 | | |
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A 20000306 |
| FAN 2001:451045 | | | US 2001-772680 | 20010130 |
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IE, SI, LT, LV, FI, RO | | | | |
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US 1999-460035 | 19991213 |
| FAN 2002:153669 | | | US 1998-9557 | 19980120 |
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| | | | US 2000-491355 | A 20000126 |
| | | | US 2000-519534 | A 20000306 |
| EP 1109244 | A2 | 20010620 | EP 2000-311118 | 20001213 |
| EP 1109244 | A3 | 20020724 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO | | | | |
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| | | | US 2000-519534 | A 20000306 |
| JP 2001176548 | A2 | 20010629 | JP 2000-378551 | 20001213 |
| | | | US 1999-460035 | A 19991213 |
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| | | | US 2000-519534 | A 20000306 |
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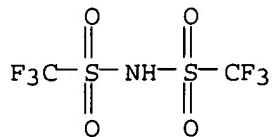
AB An alkali metal, solid cathode, nonaq. electrochem. cell capable of delivering high current pulses, rapidly recovering its open circuit voltage and having high current capacity, is disclosed. The stated benefits are realized by the addition of at least one organic sulfate additive to an electrolyte comprising an alkali metal salt dissolved in a mixture of a low viscosity solvent and a high permittivity solvent. A preferred solvent mixture includes propylene carbonate, dimethoxyethane and a sulfate additive.

IT 90076-65-6

RL: DEV (Device component use); USES (Uses)
(alkali metal electrochem. cell activated with nonaq. electrolyte
having sulfate additive)

RN 90076-65-6 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME)



● Li

RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 110 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2001:531955 CAPLUS
DN 135:124958
TI Polymerizing molten salt monomer, electrolyte composition, and
electrochemical cell
IN Ono, Michio; Sen, Masakazu
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 32 pp.
CODEN: JKXXAF
DT Patent

LA Japanese

FAN CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---------------|------|----------|-----------------|------------|
| PI | JP 2001199961 | A2 | 20010724 | JP 2000-13048 | 20000121 |
| | US 2001026890 | A1 | 20011004 | US 2001-765368 | 20010122 |
| | US 6750352 | B2 | 20040615 | | |
| | | | | JP 2000-13048 | A 20000121 |

OS MARPAT 135:124958

AB The title monomer is represented as $Q[Y_1(CH_2CH_2O)_nY_2]_mX$ [Q = N-containing aromatic heterocyclic group for forming a cation; Y_1 = divalent bond; Y_2 = (substituted) alkyl; n = 2-20 integer; m = ≥ 2 integer; X = anion; ≥ 1 of Y_2 contains a polymerizing group; Q or Y_2 may be linked to give a dimer or a tetramer]. The title electrolyte composition contains a polymer obtained by polymerizing the monomer. An electrochem. cell containing the electrolyte composition is also claimed. Preferably, the cell contains a charge-transfer layer containing the electrolyte composition and a photosensitive

layer containing a dye-sensitized semiconductor. The electrolyte composition has

high charge-transfer property, photoelec. conversion efficiency, durability, and ion conductivity and is especially suitable for a secondary nonaq.

battery and a solar cell.

IT 351182-09-7P 351182-12-2P

RL: IMF (Industrial manufacture); PREP (Preparation)
(preparation of; in preparation of polymerizing molten salt monomer for polymer

electrolyte composition)

RN 351182-09-7 CAPLUS

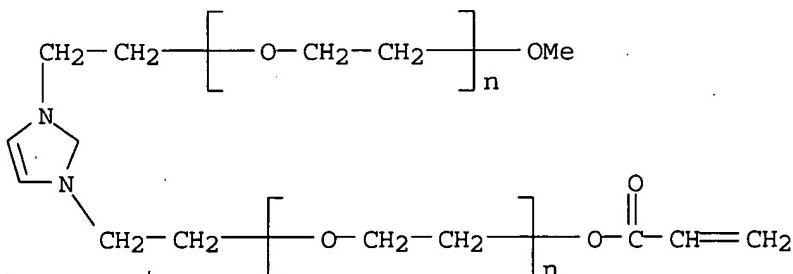
CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, ion(1-), α,α' -(imidazolium-1,3-diylidene-2,1-ethanediyl)bis[ω -methoxypoly(oxy-1,2-ethanediyl)] (9CI) (CA INDEX NAME)

CM 1

CRN 351182-08-6

CMF (C₂H₄O)_n (C₂H₄O)_n C₁₁H₁₇N₂O₃

CCI PMS

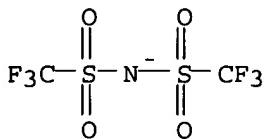


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 98837-98-0

CMF C₂F₆N O₄S₂



RN 351182-12-2 CAPLUS

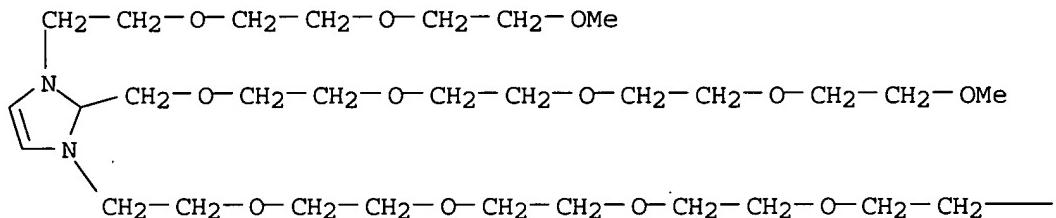
CN 1H-Imidazolium, 1-[2-[2-(2-methoxyethoxy)ethoxy]ethyl]-3-(19-oxo-3,6,9,12,15,18-hexaoxaheneicos-20-en-1-yl)-2-(2,5,8,11,14-pentaoxapentadec-1-yl)-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

CM 1

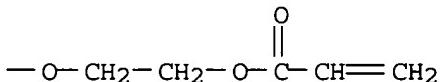
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CMF C35 H65 N2 O15

PAGE 1-A



PAGE 1-B

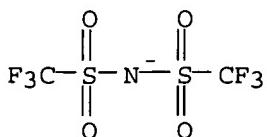


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 98837-98-0

CMF C2 F6 N O4 S2



IT 90076-65-6, Lithium bis(trifluoromethylsulfonyl)amide

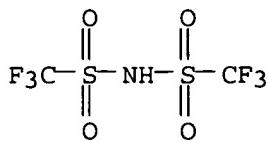
RL: RCT (Reactant); RACT (Reactant or reagent)

(reaction of; in preparation of polymerizing molten salt monomer for polymer electrolyte composition)

RN 90076-65-6 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-,

lithium salt (9CI) (CA INDEX NAME)



● Li

L14 ANSWER 111 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2001:524704 CAPLUS

DN 135:114408

TI Photoelectrochemical cell comprising polymer electrolyte composition formed by polymerizing ionic liquid crystal monomer

IN Ono, Michio

PA Fuji Photo Film Co., Ltd., Japan

SO Eur. Pat. Appl., 43 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|--|------|----------|-----------------|------------|
| PI | EP 1116769 | A2 | 20010718 | EP 2001-100999 | 20010117 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO | | | | |
| | JP 2001202995 | A2 | 20010727 | JP 2000-8054 | A 20000117 |
| | US 2002034690 | A1 | 20020321 | JP 2000-8054 | 20000117 |
| | US 6727023 | B2 | 20040427 | US 2001-759363 | 20010116 |
| | | | | JP 2000-8054 | A 20000117 |

OS MARPAT 135:114408

AB Disclosed is an electrolyte composition comprising a polymer compound formed by polymerizing an ionic liquid crystal monomer containing at least one polymerizable

group. Also disclosed are an electrochem. cell, a nonaq. secondary cell and a photoelectrochem. cell, each comprising the electrolyte composition. In accordance with the present invention, an electrolyte which does not substantially volatilize and exhibits excellent charge-transporting properties can be obtained, making it possible to obtain a photoelectrochem. cell having excellent photoelec./conversion properties and less deterioration of properties with time. Further, a lithium ion-conducting material having an extremely high ionic conductivity at low temps.

can be obtained.

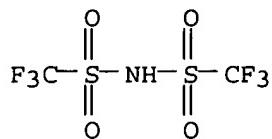
IT 90076-65-6

RL: RCT (Reactant); RACT (Reactant or reagent)

(in preparation of ionic liquid crystal monomer containing polymerizable group)

RN 90076-65-6 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME)



● Li

IT 350507-53-8P

RL: PEP (Physical, engineering or chemical process); SPN (Synthetic preparation); PREP (Preparation); PROC (Process)
 (photoelectrochem. cell containing polymerizable ionic liquid crystal monomer)

RN 350507-53-8 CAPLUS

CN Pyridinium, 4-(trans-5-decyl-1,3-dioxan-2-yl)-1-(19-oxo-3,6,9,12,15,18-hexaoxaheneicos-20-en-1-yl)-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

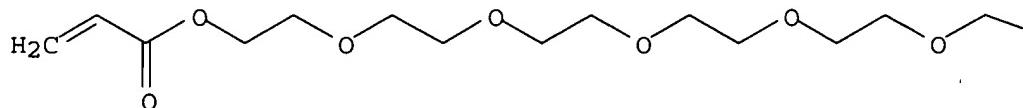
CM 1

CRN 350507-52-7

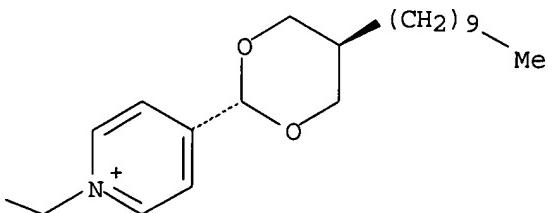
CMF C34 H58 N 09

Relative stereochemistry.

PAGE 1-A



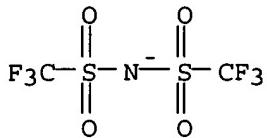
PAGE 1-B



CM 2

CRN 98837-98-0

CMF C2 F6 N 04 S2



L14 ANSWER 112 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2001:489871 CAPLUS
 DN 135:79494
 TI Alkali metal battery activated with a nonaqueous electrolyte having a sulfate additive
 IN Gan, Hong; Takeuchi, Esther S.
 PA USA
 SO U.S. Pat. Appl. Publ., 7 pp., Cont.-in-part of U.S. 6,180,283.
 CODEN: USXXCO
 DT Patent
 LA English
 FAN.CNT 6

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---------------|------|----------|--------------------------------|----------------------------|
| PI | US 2001006751 | A1 | 20010705 | US 2001-772680 | 20010130 |
| | US 6444360 | B2 | 20020903 | US 1998-9557
US 1999-460035 | A2 19980120
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| | US 6013394 | A | 20000111 | US 1998-9557 | 19980120 |
| | US 6180283 | B1 | 20010130 | US 1999-460035
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A 19980120 |

PATENT FAMILY INFORMATION:

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A 19980120 |
| | US 6265106 | B1 | 20010724 | US 2000-491355
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A2 19980120 |
| | US 6350546 | B1 | 20020226 | US 2000-519534
US 1998-9557
US 1999-460035 | 20000306
A2 19980120
A2 19991213 |
| | US 2001006751 | A1 | 20010705 | US 2000-491355
US 2001-772680 | A2 20000126
20010130 |
| | US 6444360 | B2 | 20020903 | US 1998-9557
US 1999-460035 | A2 19980120
A2 19991213 |

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
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| FAN 2001:537410 | | | | |
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| | | | US 1999-460035 | A2 19991213 |
| | | | US 2000-491355 | A2 20000126 |
| CA 2316438 | AA | 20010613 | CA 2000-2316438 | 20000818 |
| | | | US 1999-460035 | A 19991213 |
| | | | US 2000-491355 | A 20000126 |
| | | | US 2000-519534 | A 20000306 |
| EP 1109244 | A2 | 20010620 | EP 2000-311118 | 20001213 |
| EP 1109244 | A3 | 20020724 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO | | | | |
| | | | US 1999-460035 | A 19991213 |
| | | | US 2000-491355 | A 20000126 |
| | | | US 2000-519534 | A 20000306 |

| | | | | |
|--|------|----------|--|---|
| JP 2001176548 | A2 | 20010629 | JP 2000-378551
US 1999-460035
US 2000-491355
US 2000-519534 | 20001213
A 19991213
A 20000126
A 20000306 |
| TW 478201 | B | 20020301 | TW 2000-89126603
US 1999-460035
US 2000-491355
US 2000-519534 | 20001213
A 19991213
A 20000126
A 20000306 |
| FAN 2002:153669
PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
| PI US 6350546 | B1 | 20020226 | US 2000-519534
US 1998-9557
US 1999-460035
US 2000-491355 | 20000306
A2 19980120
A2 19991213
A2 20000126 |
| US 6013394 | A | 20000111 | US 1998-9557 | 19980120 |
| US 6180283 | B1 | 20010130 | US 1999-460035
US 1998-9557 | 19991213
A 19980120 |
| US 6265106 | B1 | 20010724 | US 2000-491355
US 1998-9557
US 1999-460035 | 20000126
A2 19980120
A2 19991213 |
| CA 2316438 | AA | 20010613 | CA 2000-2316438
US 1999-460035
US 2000-491355
US 2000-519534 | 20000818
A 19991213
A 20000126
A 20000306 |
| EP 1109244 | A2 | 20010620 | EP 2000-311118 | 20001213 |
| EP 1109244 | A3 | 20020724 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO | | | | |
| JP 2001176548 | A2 | 20010629 | US 1999-460035
US 2000-491355
US 2000-519534 | A 19991213
A 20000126
A 20000306 |
| TW 478201 | B | 20020301 | JP 2000-378551
US 1999-460035
US 2000-491355
US 2000-519534 | 20001213
A 19991213
A 20000126
A 20000306 |

OS MARPAT 135:79494

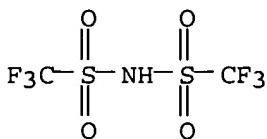
AB An alkali metal, solid cathode, nonaq. electrochem. cell capable of delivering high current pulses, rapidly recovering its open circuit voltage and having high current capacity, is disclosed. The stated benefits are realized by the addition of at least one organic sulfate additive to an electrolyte comprising an alkali metal salt dissolved in a mixture of a low viscosity solvent and a high permittivity solvent. A preferred solvent mixture includes propylene carbonate, 1,2-dimethoxyethane and a sulfate additive having at least one unsatd. hydrocarbon containing a C(sp or sp₂)-C(sp₃) bond unit having the C(sp₃) carbon directly connected to the -OSO₃- functional group.

IT 90076-65-6

RL: DEV (Device component use); USES (Uses)
(alkali metal battery activated with nonaq. electrolyte having sulfate additive)

RN 90076-65-6 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME)



● Li

L14 ANSWER 113 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2001:488749 CAPLUS

DN 135:79459

TI Preparation of a mixed metal oxide cathode active material by sequential decomposition and combination reactions

IN Leising, Randolph A.; Takeuchi, Esther S.

PA Wilson Greatbatch Ltd., USA

SO Eur. Pat. Appl., 18 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|--|------|----------|-----------------|------------|
| PI | EP 1113514 | A1 | 20010704 | EP 2000-311738 | 20001228 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO | | | US 1999-173407P | P 19991228 |
| | JP 2001243955 | A2 | 20010907 | JP 2000-401298 | 20001228 |
| | | | | US 1999-173407P | P 19991228 |
| | US 2002006549 | A1 | 20020117 | US 2001-746787 | 20010312 |
| | | | | US 1999-173407P | P 19991228 |

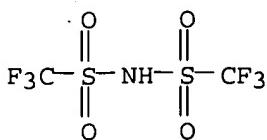
AB A mixed metal oxide, such as **silver** vanadium oxide, prepared by sequential decomposition and combination reactions is disclosed. In the case of **silver** vanadium oxide, the product material is produced from a decomposable salt of **silver** and vanadium oxide first heated above the decomposition temperature of the **silver** salt followed by cooling and then a second heating above the decomposition temperature. The product **silver** vanadium oxide material is coupled with a lithium anode and activated with a nonaq. electrolyte to provide an improved high energy d. electrochem. cell having increased pulse voltages and a reduction in voltage delay.

IT 90076-65-6

RL: DEV (Device component use); USES (Uses)
(preparation of mixed metal oxide cathode active material by sequential decomposition and combination reactions)

RN 90076-65-6 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME)



● Li

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 114 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2001:444511 CAPLUS
DN 135:45936
TI Preparation of tertiary carboxylic acids or their esters using bis(perfluoroalkylsulfonyl)imide catalysts
IN Aima, Yoshie; Tsumori, Nobuko; Sakaguchi, Hiroaki; Sakai, Shigenori
PA Ministry of Economy, Trade and Industry; National Industrial Research Institute, Japan; Central Glass Co., Ltd.
SO Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF

DT Patent
LA Japanese

FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|-------|----------|----------------------------------|----------------------|
| ----- | ----- | ----- | ----- | ----- |
| JP 2001163825 | A2 | 20010619 | JP 1999-349615
JP 1999-349615 | 19991209
19991209 |

OS CASREACT 135:45936

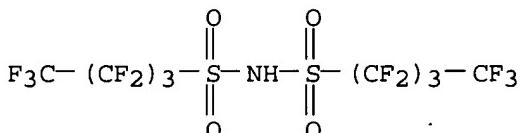
AB Tertiary carboxylic acids or their esters are prepared by reaction of C \geq 4 olefins, alcs., or C \geq 8 dienes with CO in the presence of bis(perfluoroalkylsulfonyl)imide metal salts and optional esterification with alcs. Bis(trifluoromethylsulfonyl)imide was treated with CuO followed by CO at 60° for 3 h to form Cu imide CO complex, which was mixed with 1-hexene to give 25% 4:1 mixture of 2,2-dimethylpentanoic acid and 2-methyl-2-ethylbutanoic acid.

IT 39847-39-7 82113-65-3, Bis(trifluoromethylsulfonyl)imide
129318-46-3, Bis(perfluoroethylsulfonyl)imide 152894-12-7

RL: CAT (Catalyst use); USES (Uses)
(catalyst from; preparation of tertiary carboxylic acids or their esters by carboxylation using bis(perfluoroalkylsulfonyl)imide catalysts)

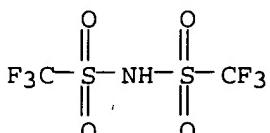
RN 39847-39-7 CAPLUS

CN 1-Butanesulfonamide, 1,1,2,2,3,3,4,4,4-nonafluoro-N-[(nonafluorobutyl)sulfonyl]- (9CI) (CA INDEX NAME)



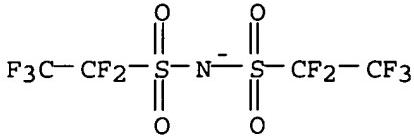
RN 82113-65-3 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]- (9CI) (CA INDEX NAME)

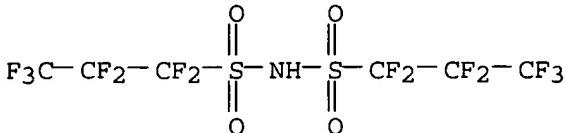


RN 129318-46-3 CAPLUS

CN Ethanesulfonamide, 1,1,2,2,2-pentafluoro-N-[(pentafluoroethyl)sulfonyl]-, ion(1-) (9CI) (CA INDEX NAME)



RN 152894-12-7 CAPLUS
 CN 1-Propanesulfonamide, 1,1,2,2,3,3,3-heptafluoro-N-
 [(heptafluoropropyl)sulfonyl] - (9CI) (CA INDEX NAME)



L14 ANSWER 115 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2001:397240 CAPLUS
 DN 135:7792
 TI Lithium anodes for electrochemical cells
 IN Skotheim, Terje A.; Sheehan, Christopher J.; Mikhaylik, Yuriy V.
 PA Moltech Corporation, USA
 SO PCT Int. Appl., 41 pp.
 CODEN: PIXXD2

DT Patent
 LA English

FAN.CNT 3

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|--|------|-----------------|-----------------|------------|
| PI | WO 2001039303 | A1 | 20010531 | WO 2000-US32234 | 20001121 |
| | W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,
YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | US 1999-167171P | P 19991123 | |
| AU | 2001017967 | A5 | 20010604 | AU 2001-17967 | 20001121 |
| | | | | US 1999-167171P | P 19991123 |
| | | | | WO 2000-US32234 | W 20001121 |
| EP | 1234348 | A1 | 20020828 | EP 2000-980746 | 20001121 |
| EP | 1234348 | B1 | 20031022 | | |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL | | | US 1999-167171P | P 19991123 |
| | | | | WO 2000-US32234 | W 20001121 |
| JP | 2003515893 | T2 | 20030507 | JP 2001-540870 | 20001121 |
| | | | | US 1999-167171P | P 19991123 |
| | | | | WO 2000-US32234 | W 20001121 |

PATENT FAMILY INFORMATION:

FAN 2001:397239

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---|------|----------|-----------------|----------|
| PI | WO 2001039302 | A1 | 20010531 | WO 2000-US32232 | 20001121 |
| | W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, | | | | |

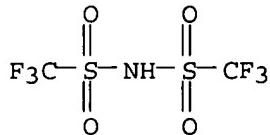
HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
 LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
 SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,
 YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
 DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
 BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
 US 1999-167171P P 19991123
 AU 2001016286 A5 20010604 AU 2001-16286 20001121
 US 1999-167171P P 19991123
 WO 2000-US32232 W 20001121
 EP 1236231 A1 20020904 EP 2000-978872 20001121
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
 US 1999-167171P P 19991123
 WO 2000-US32232 W 20001121
 JP 2003515892 T2 20030507 JP 2001-540869 20001121
 US 1999-167171P P 19991123
 WO 2000-US32232 W 20001121
FAN 2002:90544
 PATENT NO. KIND DATE APPLICATION NO. DATE
 ----- ----- -----
 PI US 2002012846 A1 20020131 US 2001-864890 20010523
 US 1999-167171P P 19991123
 US 2000-721519 A2 20001121
 US 2000-721578 A2 20001121
 US 6733924 B1 20040511 US 2000-721519 20001121
 US 1999-167171P P 19991123
 US 6797428 B1 20040928 US 2000-721578 20001121
 US 1999-167171P P 19991123
 WO 2002095849 A2 20021128 WO 2002-US16649 20020523
 WO 2002095849 A3 20031204
 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
 CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
 GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
 LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT,
 RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US,
 UZ, VN, YU, ZA, ZW
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
 KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB,
 GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA,
 GN, GQ, GW, ML, MR, NE, SN, TD, TG
 US 2001-864890 A 20010523
 EP 1407505 A2 20040414 EP 2002-739419 20020523
 EP 1407505 B1 20050803
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
 US 2001-864890 A 20010523
 WO 2002-US16649 W 20020523
 CN 1511351 A 20040707 CN 2002-810473 20020523
 US 2001-864890 A 20010523
 JP 2004527888 T2 20040909 JP 2002-592213 20020523
 US 2001-864890 A 20010523
 WO 2002-US16649 W 20020523
 US 2005008935 A1 20050113 US 2004-913839 20040806
 US 6936381 B2 20050830
 US 1999-167171P P 19991123
 US 2000-721578 A1 20001121
AB Provided are lithium anodes for use in electrochem. cells, where the anode active layer has a first layer comprising lithium metal and a second layer of a temporary protective material, wherein the temporary protective material is a metal capable of forming an alloy with lithium metal or is capable of diffusing into lithium metal. The present invention also

pertains to methods of forming such anodes, electrochem. cells comprising such anodes, and methods of making such cells.

IT 90076-65-6, Lithium bis(trifluoromethylsulfonyl)imide
 RL: DEV (Device component use); USES (Uses)
 (lithium anodes for electrochem. cells)

RN 90076-65-6 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME)



● Li

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 116 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2001:185225 CAPLUS

DN 134:210580

TI Secondary lithium batteries

IN Ichihashi, Akira; Oshita, Ryuji; Fujitani, Nobu

PA Sanyo Electric Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---------------|------|----------|----------------------------------|------------------------|
| PI | JP 2001068154 | A2 | 20010316 | JP 2000-175265
JP 1999-179789 | 20000612
A 19990625 |
| | US 6489055 | B1 | 20021203 | US 2000-598942
JP 1999-179789 | 20000622
A 19990625 |

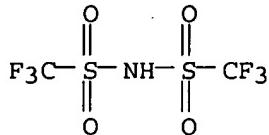
AB The batteries use an electrolyte solution having a electrolyte solute selected from $(\text{C}_n\text{F}_{2n+1}\text{SO}_2)(\text{C}_m\text{F}_{2m+1}\text{SO}_2)\text{NLi}$ (M and n = integer 1-4) and $(\text{C}_j\text{F}_{2j+1}\text{SO}_2)(\text{C}_k\text{F}_k+1\text{SO}_2)(\text{C}_l\text{F}_{2l+1}\text{SO}_2)\text{CLi}$ (j , k , and l = integer 1-4) and a fluoride or P compound additive. The additive is selected from metal fluorides and Li phosphate salts.

IT 90076-65-6 132843-44-8 176719-70-3

RL: DEV (Device component use); USES (Uses)
 (compns. of electrolyte solns. containing metal fluoride and lithium phosphate additives in secondary lithium batteries)

RN 90076-65-6 CAPLUS

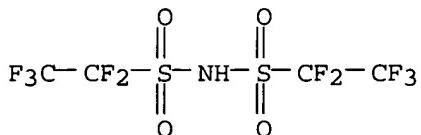
CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME)



● Li

RN 132843-44-8 CAPLUS

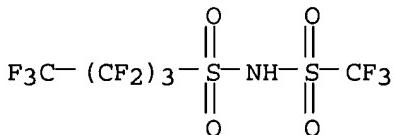
CN Ethanesulfonamide, 1,1,2,2,2-pentafluoro-N-[(pentafluoroethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME)



● Li

RN 176719-70-3 CAPLUS

CN 1-Butanesulfonamide, 1,1,2,2,3,3,4,4,4-nonafluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME)



● Li

L14 ANSWER 117 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2001:181023 CAPLUS

DN 134:244378

TI Electrolyte composition for photoelectric converters and solar batteries

IN Ono, Michio; Wariishi, Koji

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 48 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------|-------|----------|----------------------------------|----------------------|
| ----- | ----- | ----- | ----- | ----- |
| PI JP 2001067931 | A2 | 20010316 | JP 1999-238962
JP 1999-238962 | 19990825
19990825 |

OS MARPAT 134:244378

AB The title electrolyte composition contains Zy_1 -(-Ly-Qy₁)_nX₁ or (Zy₁-Ly-)_n-Qy₁ nX₁ (Zy₁ = organic cation residue such as imidazole derivative; Ly = divalent connecting group such as -CH₂-; Qy₁ = cyclic substituent containing -CH₂CH₂O-

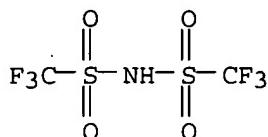
group such as crown ether; n = 1-4 integer; X1 = anion). The electrolyte containing the above compound shows the good durability and charge transporting characteristics.

IT 90076-65-6

RL: RCT (Reactant); RACT (Reactant or reagent)
(electrolyte composition for photoelec. converters and solar batteries)

RN 90076-65-6 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-,
lithium salt (9CI) (CA INDEX NAME)



● Li

IT 329934-59-0P

RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(electrolyte composition for photoelec. converters and solar batteries)

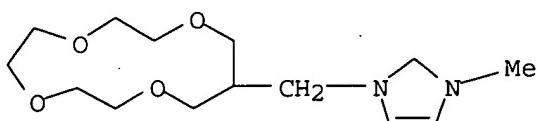
RN 329934-59-0 CAPLUS

CN 1H-Imidazolium, 1-methyl-3-(1,4,7,10-tetraoxacyclotridec-12-ylmethyl)-,
salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide.
(1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 329934-56-7

CMF C14 H25 N2 O4

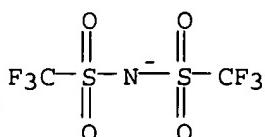


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 98837-98-0

CMF C2 F6 N O4 S2



L14 ANSWER 118 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN

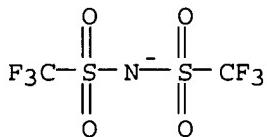
AN 2001:161760 CAPLUS

DN 134:214050

TI Electrodeposition of metals in hydrophobic room temperature molten salts

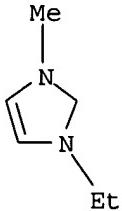
AU and its application to electroplating
 AU Katayama, Yasushi; Miura, Takashi; Kishi, Tomiya
 CS Fac. Sci. Technol., Keio Univ., 3-14-1, Hiyoshi, Kohoku-ku, Yokohama-shi,
 Kanagawa, 223-8522, Japan
 SO Hyomen Gijutsu (2001), 52(1), 64-65
 CODEN: HYGIEX; ISSN: 0915-1869
 PB Hyomen Gijutsu Kyokai
 DT Journal; General Review
 LA Japanese
 AB A review with 9 refs. The possibilities of successful electrodeposition
 of some metals from 1-ethyl-3-methylimidazolium-type room-temperature molten
 salts are investigated.
 IT 174899-82-2
 RL: PRP (Properties); TEM (Technical or engineered material use); USES
 (Uses)
 (electrodeposition of metals from hydrophobic room temperature molten salts
 and its application to electroplating)
 RN 174899-82-2 CAPLUS
 CN 1H-Imidazolium, 1-ethyl-3-methyl-, salt with 1,1,1-trifluoro-N-
 [(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

CM 1
 CRN 98837-98-0
 CMF C2 F6 N O4 S2



CM 2

CRN 65039-03-4
 CMF C6 H11 N2



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

L14 ANSWER 119 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2001:73421 CAPLUS
 DN 134:103344
 TI Method for reducing voltage delay in an alkali metal electrochemical cell
 activated with a nonaqueous electrolyte having a sulfate additive
 IN Gan, Hong; Takeuchi, Esther S.
 PA Wilson Greatbatch Ltd., USA
 SO U.S., 13 pp., Cont.-in-part of U.S. 6,013,394.
 CODEN: USXXAM
 DT Patent

LA English

FAN CNT 6

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|--|------|----------|--|--|
| PI | US 6180283 | B1 | 20010130 | US 1999-460035
US 1998-9557 | 19991213
A 19980120 |
| | US 6013394 | A | 20000111 | US 1998-9557 | 19980120 |
| | US 6265106 | B1 | 20010724 | US 2000-491355
US 1998-9557 | 20000126
A2 19980120 |
| | US 6350546 | B1 | 20020226 | US 1999-460035
US 2000-519534
US 1998-9557 | A2 19991213
20000306
A2 19980120 |
| | CA 2316438 | AA | 20010613 | US 1999-460035
US 2000-491355
US 2000-519534 | A2 19991213
A 20000126
A 20000306 |
| | EP 1109244 | A2 | 20010620 | CA 2000-2316438
EP 2000-311118 | 20000818
20001213 |
| | EP 1109244 | A3 | 20020724 | US 1999-460035
US 2000-491355
US 2000-519534 | A 19991213
A 20000126
A 20000306 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO | | | US 1999-460035
US 2000-491355
US 2000-519534 | A 19991213
A 20000126
A 20000306 |
| JP | 2001176548 | A2 | 20010629 | JP 2000-378551
US 1999-460035
US 2000-491355
US 2000-519534 | 20001213
A 19991213
A 20000126
A 20000306 |
| TW | 478201 | B | 20020301 | TW 2000-89126603
US 1999-460035
US 2000-491355
US 2000-519534 | 20001213
A 19991213
A 20000126
A 20000306 |
| US | 2001006751 | A1 | 20010705 | US 2001-772680 | 20010130 |
| US | 6444360 | B2 | 20020903 | US 1998-9557
US 1999-460035 | A2 19980120
A2 19991213 |

PATENT FAMILY INFORMATION:

FAN 2000:31275

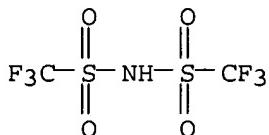
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US 2000-491355 | A 19980120
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US 2000-519534
US 1998-9557 | A2 19991213
20000306
A2 19980120 |
| | US 2001006751 | A1 | 20010705 | US 1999-460035
US 2000-491355
US 2001-772680 | A2 19991213
A2 20000126
20010130 |
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US 1999-460035 | A2 19980120
A2 19991213 |

FAN 2001:451045

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| PI | EP 1109244 | A2 | 20010620 | EP 2000-311118 | 20001213 |
| | EP 1109244 | A3 | 20020724 | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO | A 19991213 |
| | | | | US 1999-460035 | |

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|--|-------|----------|--|------------------|-------------|
| | | | | US 2000-491355 | A 20000126 |
| US 6180283 | B1 | 20010130 | | US 2000-519534 | A 20000306 |
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| US 6350546 | B1 | 20020226 | | US 1999-460035 | A2 19991213 |
| | | | | US 2000-519534 | 20000306 |
| | | | | US 1998-9557 | A2 19980120 |
| | | | | US 1999-460035 | A2 19991213 |
| | | | | US 2000-491355 | A2 20000126 |
| FAN 2001:489871 | | | | | |
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| PI US 2001006751 | A1 | 20010705 | | US 2001-772680 | 20010130 |
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| | | | | US 1999-460035 | A2 19991213 |
| US 6013394 | A | 20000111 | | US 1998-9557 | 19980120 |
| US 6180283 | B1 | 20010130 | | US 1999-460035 | 19991213 |
| | | | | US 1998-9557 | A 19980120 |
| FAN 2001:537410 | | | | | |
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| US 6180283 | B1 | 20010130 | | US 1999-460035 | 19991213 |
| | | | | US 1998-9557 | A 19980120 |
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| | | | | US 1998-9557 | A2 19980120 |
| | | | | US 1999-460035 | A2 19991213 |
| | | | | US 2000-491355 | A2 20000126 |
| CA 2316438 | AA | 20010613 | | CA 2000-2316438 | 20000818 |
| | | | | US 1999-460035 | A 19991213 |
| | | | | US 2000-491355 | A 20000126 |
| | | | | US 2000-519534 | A 20000306 |
| EP 1109244 | A2 | 20010620 | | EP 2000-311118 | 20001213 |
| EP 1109244 | A3 | 20020724 | | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO | | | | US 1999-460035 | A 19991213 |
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| | | | | US 2000-519534 | A 20000306 |
| JP 2001176548 | A2 | 20010629 | | JP 2000-378551 | 20001213 |
| | | | | US 1999-460035 | A 19991213 |
| | | | | US 2000-491355 | A 20000126 |
| | | | | US 2000-519534 | A 20000306 |
| TW 478201 | B | 20020301 | | TW 2000-89126603 | 20001213 |
| | | | | US 1999-460035 | A 19991213 |
| | | | | US 2000-491355 | A 20000126 |
| | | | | US 2000-519534 | A 20000306 |
| FAN 2002:153669 | | | | | |
| PATENT NO. | KIND | DATE | | APPLICATION NO. | DATE |
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| PI US 6350546 | B1 | 20020226 | | US 2000-519534 | 20000306 |
| | | | | US 1998-9557 | A2 19980120 |
| | | | | US 1999-460035 | A2 19991213 |
| | | | | US 2000-491355 | A2 20000126 |
| US 6013394 | A | 20000111 | | US 1998-9557 | 19980120 |
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| | | | | US 1998-9557 | A 19980120 |

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| US 6265106 | B1 | 20010724 | US 2000-491355 | 20000126 |
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| CA 2316438 | AA | 20010613 | CA 2000-2316438 | 20000818 |
| | | | US 1999-460035 | A 19991213 |
| | | | US 2000-491355 | A 20000126 |
| | | | US 2000-519534 | A 20000306 |
| EP 1109244 | A2 | 20010620 | EP 2000-311118 | 20001213 |
| EP 1109244 | A3 | 20020724 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO | | | | |
| | | | US 1999-460035 | A 19991213 |
| | | | US 2000-491355 | A 20000126 |
| | | | US 2000-519534 | A 20000306 |
| JP 2001176548 | A2 | 20010629 | JP 2000-378551 | 20001213 |
| | | | US 1999-460035 | A 19991213 |
| | | | US 2000-491355 | A 20000126 |
| | | | US 2000-519534 | A 20000306 |
| TW 478201 | B | 20020301 | TW 2000-89126603 | 20001213 |
| | | | US 1999-460035 | A 19991213 |
| | | | US 2000-491355 | A 20000126 |
| | | | US 2000-519534 | A 20000306 |
| OS MARPAT 134:103344 | | | | |
| AB | An alkali metal, solid cathode, nonaq. electrochem. cell capable of delivering high current pulses, rapidly recovering its open circuit voltage and having high current capacity, is disclosed. The stated benefits are realized by the addition of at least one organic sulfate additive to an electrolyte comprising an alkali metal salt dissolved in a mixture of a low viscosity solvent and a high permittivity solvent. A preferred solvent mixture includes propylene carbonate, dimethoxyethane and a sulfate additive having at least one unsatd. hydrocarbon containing a C(sp ₂ or sp ₃) -C(sp ₃) bond unit having the C(sp ₃) carbon directly connected to the -OSO ₃ ⁻ functional group, or an silyl sulfate or a tin sulfate. | | | |
| IT 90076-65-6 | RL: DEV (Device component use); USES (Uses)
(method for reducing voltage delay in alkali metal electrochem. cell activated with nonaq. electrolyte having sulfate additive) | | | |
| RN 90076-65-6 CAPLUS | | | | |
| CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME) | | | | |



● Li

RE.CNT 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 120 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2000:772641 CAPLUS
 DN 133:335330
 TI N-tri or di-alkylsilyl(perfluoroalkanesulfonyl)imide derivatives, preparation and use as Lewis acid catalysts
 IN Desmurs, Jean-Roger; Ghosez, Leon; Mathieu, Benoit
 PA Rhodia Chimie, Fr.

SO PCT Int. Appl., 48 pp.

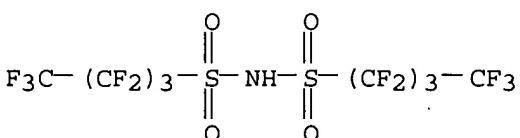
CODEN: PIXXD2

DT Patent

LA French

FAN.CNT 1

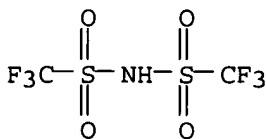
| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|--|------|----------|-----------------|------------|
| PI | WO 2000064908 | A1 | 20001102 | WO 2000-FR1028 | 20000419 |
| | W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| | RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | FR 1999-5195 | A 19990423 |
| OS | FR 2792636 | A1 | 20001027 | FR 1999-5195 | 19990423 |
| AB | CASREACT 133:335330; MARPAT 133:335330 | | | | |
| AB | The invention concerns N-tri or di-alkylsilyl(perfluoroalkylsulfonyl)imide derivs. $[(RfSO_2)_y(R(SO_2)_z)N]nSi(A)m$ ($y = 1, 2$; $z = 0$ or 1 ; $y+z = 2$; $Rf =$ halo (preferably F), poly- or perhaloalkyl with the chain contingently containing ≥ 1 O or S atoms, poly- or perhaloaryl, RACF ₂ , RACF ₂ CF ₂ , RACF(CF ₃)CF ₂ , CF ₃ CF(RA), (CF ₃)RA (RA = R (see below) but not halo or polyhalo organic radical); R = Rf, alkyl or alkenyl possibly with O, S or carbonyl in chain and possibly with halo, carboxy or silyl groups as substituents, aryl possibly substituted by ≥ 1 halo, alkyl or alkenyl groups, aralkyl or aralkenyl possibly substituted by ≥ 1 halogen atoms, C(O)RE (RE = halo, C ₁₋₄ alkyl), OCRCRDRB (RB = perfluoroalkyl; RC, RD = radicals not containing halogen); n = 1, 2; m = 2, 3 with n+m = 4; A = 2 or 3 identical or different substituents chosen from a long list of possibilities). The compds. possess at least one center or axis of chirality in the nucleus of their structure. The invention also concerns a method for preparing said compds. and their use as Lewis acid catalysts in Diels-Alder, carbonyl allylation, ene, Prins and Michael addition reactions. Enantiomeric excesses as high as 59% were obtained using chiral sulfonimides. The preparative method usually consisted of reacting a chlorosilane with the Ag salt of $(RfSO_2)_y(R(SO_2)_z)NH$ or reacting A ₃ SiPh or A ₃ SiCH ₂ CH ₂ with $(RfSO_2)_y(R(SO_2)_z)NH$. | | | | |
| IT | 39847-39-7 | | | | |
| | RL: RCT (Reactant); RACT (Reactant or reagent)
(condensation with allyltrimethylsilane) | | | | |
| RN | 39847-39-7 CAPLUS | | | | |
| CN | 1-Butanesulfonamide, 1,1,2,2,3,3,4,4,4-nonafluoro-N-[
(nonafluorobutyl)sulfonyl]- (9CI) (CA INDEX NAME) | | | | |



IT 82113-65-3, Bis(trifluoromethylsulfonyl)amine
RL: RCT (Reactant); RACT (Reactant or reagent)
(condensation with organosilanes)

RN 82113-65-3 CAPLUS

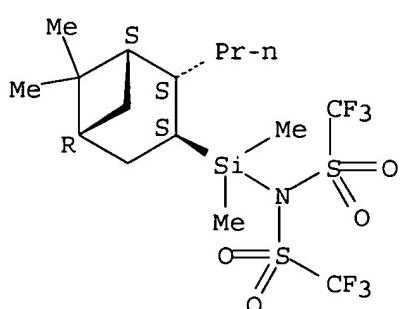
CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]- (9CI)
(CA INDEX NAME)



IT 303214-14-4P 303214-18-8P 303214-20-2P
 303214-21-3P 303214-23-5P 303214-25-7P
 303214-35-9P
 RL: CAT (Catalyst use); SPN (Synthetic preparation); PREP (Preparation);
 USES (Uses)
 (in situ formation and application as catalyst in asym. synthesis)

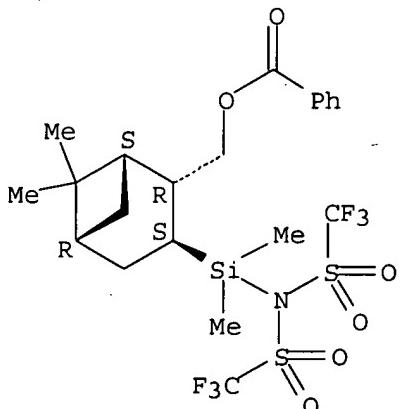
RN 303214-14-4 CAPPLUS
 CN Methanesulfonamide, N-[(1S,2S,3S,5R)-6,6-dimethyl-2-propylbicyclo[3.1.1]hept-3-yl]dimethylsilyl]-1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



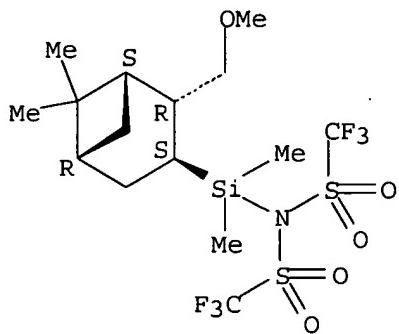
RN 303214-18-8 CAPPLUS
 CN Methanesulfonamide, N-[(1S,2R,3S,5R)-2-[(benzoyloxy)methyl]-6,6-dimethylbicyclo[3.1.1]hept-3-yl]dimethylsilyl]-1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 303214-20-2 CAPPLUS
 CN Methanesulfonamide, 1,1,1-trifluoro-N-[(1S,2R,3S,5R)-2-(methoxymethyl)-6,6-dimethylbicyclo[3.1.1]hept-3-yl]dimethylsilyl]-N-[(trifluoromethyl)sulfonyl]- (9CI) (CA INDEX NAME)

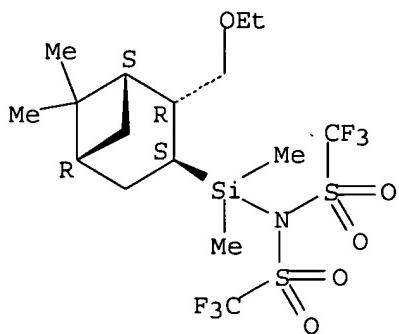
Absolute stereochemistry. Rotation (+).



RN 303214-21-3 CAPLUS

CN Methanesulfonamide, N-[(1S,2R,3S,5R)-2-(ethoxymethyl)-6,6-dimethylbicyclo[3.1.1]hept-3-yl]dimethylsilyl]-1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]- (9CI) (CA INDEX NAME)

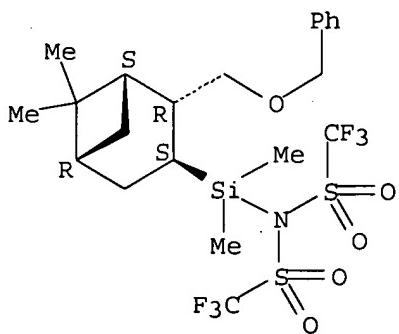
Absolute stereochemistry. Rotation (+).



RN 303214-23-5 CAPLUS

CN Methanesulfonamide, N-[(1S,2R,3S,5R)-6,6-dimethyl-2-[(phenylmethoxy)methyl]bicyclo[3.1.1]hept-3-yl]dimethylsilyl]-1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]- (9CI) (CA INDEX NAME)

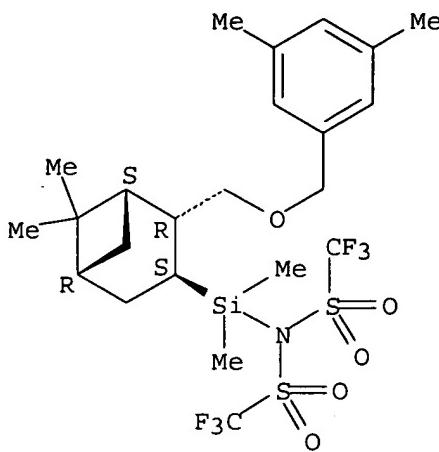
Absolute stereochemistry. Rotation (+).



RN 303214-25-7 CAPLUS

CN Methanesulfonamide, N-[(1S,2R,3S,5R)-2-[[[(3,5-dimethylphenyl)methoxy]methyl]-6,6-dimethylbicyclo[3.1.1]hept-3-yl]dimethylsilyl]-1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]- (9CI) (CA INDEX NAME)

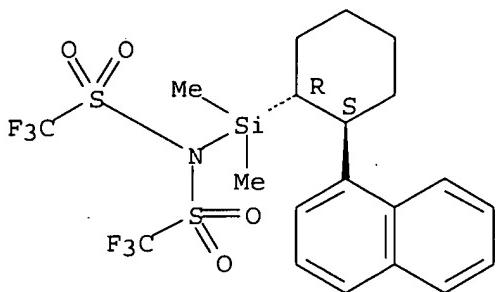
Absolute stereochemistry. Rotation (+).



RN 303214-35-9 CAPLUS

CN Methanesulfonamide, N-[dimethyl[(1R,2S)-2-(1-naphthalenyl)cyclohexyl]silyl]-1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, rel-(-)- (9CI) (CA INDEX NAME)

Rotation (-). Absolute stereochemistry unknown.



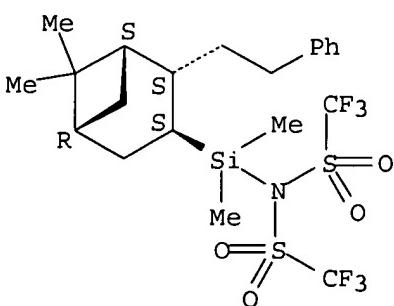
IT 303214-16-6P

RL: CAT (Catalyst use); SPN (Synthetic preparation); PREP (Preparation);
USES (Uses)
(in situ formation and attempted application as catalyst in asym.
synthesis)

RN 303214-16-6 CAPLUS

CN Methanesulfonamide, N-[(1S,2S,3S,5R)-6,6-dimethyl-2-(2-phenylethyl)bicyclo[3.1.1]hept-3-yl]dimethylsilyl]-1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



IT **303214-27-9P**

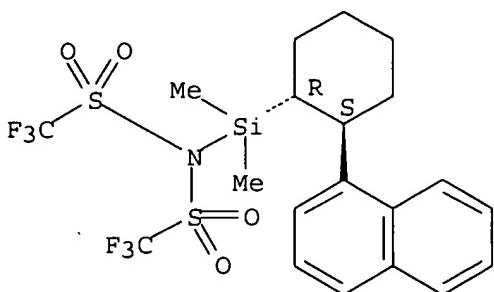
RL: CAT (Catalyst use); SPN (Synthetic preparation); PREP (Preparation);
USES (Uses)

(in situ formation and stereoselective Diels-Alder reactions catalyzed
by)

RN 303214-27-9 CAPLUS

CN Methanesulfonamide, N-[dimethyl[(1R,2S)-2-(1-naphthalenyl)cyclohexyl]silyl]-1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, rel-(+)- (9CI) (CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown.



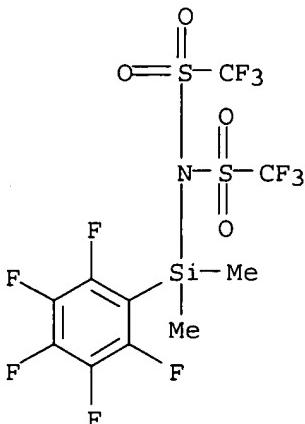
IT **303213-67-4P 303213-69-6P 303213-71-0P**

303213-75-4P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

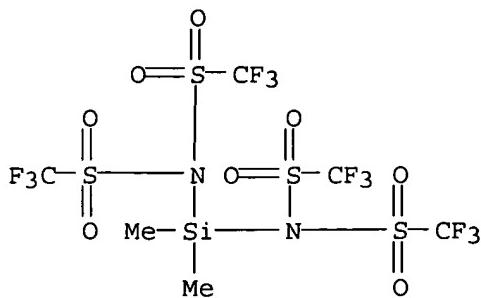
RN 303213-67-4 CAPLUS

CN Methanesulfonamide, N-[dimethyl(pentafluorophenyl)silyl]-1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]- (9CI) (CA INDEX NAME)



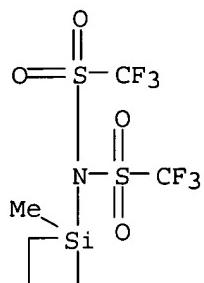
RN 303213-69-6 CAPLUS

CN Methanesulfonamide, N,N'-(dimethylsilylene)bis[1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]- (9CI) (CA INDEX NAME)



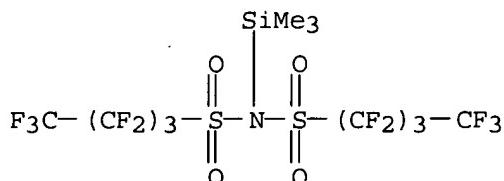
RN 303213-71-0 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-(1-methylsilacyclobut-1-yl)-N-[(trifluoromethyl)sulfonyl]- (9CI) (CA INDEX NAME)



RN 303213-75-4 CAPLUS

CN 1-Butanesulfonamide, 1,1,2,2,3,3,4,4,4-nonafluoro-N-[(nonafluorobutyl)sulfonyl]-N-(trimethylsilyl)- (9CI) (CA INDEX NAME)



RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 121 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2000:723264 CAPLUS

DN 133:298787

TI Composite electrode comprising two interpenetrating solid electrolytes
IN Besner, Simon; Armand, Michel; Magnan, Jean-Francois; Belanger, Andre;
Gauthier, Michel; Dupuis, Elisabeth

PA Hydro-Quebec, Can.

SO Eur. Pat. Appl., 21 pp.

CODEN: EPXXDW

DT Patent

LA French

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|--|------|----------|-----------------|------------|
| PI | EP 1043787 | A2 | 20001011 | EP 2000-420064 | 20000404 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO | | | CA 1999-2268316 | A 19990407 |

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| CA 2268316 | C 20030923 | CA 1999-2268316 | 19990407 |
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| JP 2000348711 | A2 20001215 | JP 2000-106151 | 20000407 |
| | | CA 1999-2268316 | A 19990407 |

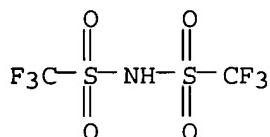
AB A composite electrode is disclosed in which 2 solid electrolytes are penetrated. The 1st electrolyte is an organic compound consisting of a dry or gelified polymer, providing a conductor by dissoln. of a salt (preferably a Li-containing salt), and acting as a deformable binder. The 2nd electrolyte is a mineral material (preferably a vitreous material) which is a conductor for Li⁺ ions and in which components of the 1st electrolyte are insol. The mineral electrolyte is used in the form of an aqueous solution or a water-light alc. mixture and is contacted with the electrodes in a dispersed form to wet solid phases of the composite (i.e., active mass of the electrode, electronic conduction additive, and a current collector). The organic electrolyte contains a polymer which is introduced into a porous mineral by impregnation to form the composite electrode.

IT 90076-65-6

RL: TEM (Technical or engineered material use); USES (Uses)
(in battery solid electrolytes)

RN 90076-65-6 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME)



● Li

L14 ANSWER 122 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2000:635203 CAPLUS

DN 133:196043

TI Hydrogen fluoride additive for nonaqueous electrolyte in alkali metal electrochemical cells

IN Takeuchi, Esther S.; Leising, Randolph A.

PA Wilson Greatbatch Ltd., USA

SO U.S., 10 pp.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|----------|
| ----- | ---- | ----- | ----- | ----- |
| PI US 6117591 | A | 20000912 | US 1998-85212 | 19980527 |
| | | | US 1998-85212 | 19980527 |

AB An alkali metal, solid cathode, nonaq. electrochem. cell capable of delivering high current pulses, rapidly recovering its open circuit voltage and having high current capacity, is disclosed. The stated benefits are realized by the addition of hydrogen fluoride to the nonaq. electrolyte comprising an alkali metal salt dissolved in a mixture of a low viscosity solvent and a high permittivity solvent. A preferred solvent mixture includes propylene carbonate, dimethoxyethane and hydrogen fluoride having LiAsF₆ or LiPF₆ dissolved therein.

IT 90076-65-6

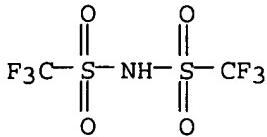
RL: DEV (Device component use); USES (Uses)

(hydrogen fluoride additive for nonaq. electrolyte in alkali metal

electrochem. cells)

RN 90076-65-6 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME)



● Li

RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 123 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2000:608508 CAPLUS
DN 133:196016
TI Cobalt-based alloys as cathode current collectors in nonaqueous electrochemical cells
IN Frysz, Christine A.; Smesko, Sally A.; Kreidler, Peter A.; Brown, W. Richard; Takeuchi, Esther S.
PA Wilson Greatbatch Ltd., USA
SO Eur. Pat. Appl., 26 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 2

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|------------|
| PI EP 1032063 | A1 | 20000830 | EP 2000-301434 | 20000223 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO | | | | |
| US 6306544 | B1 | 20011023 | US 1999-257795 | A 19990225 |
| JP 2000251898 | A2 | 20000914 | US 1999-257795 | 19990225 |
| | | | JP 2000-49516 | 20000225 |
| | | | US 1999-257795 | A 19990225 |

PATENT FAMILY INFORMATION:

FAN 2002:332598

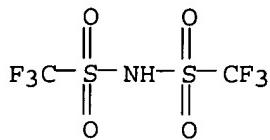
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------|------|----------|-----------------|-------------|
| PI US 2002051909 | A1 | 20020502 | US 2001-903637 | 20010712 |
| US 6541158 | B2 | 20030401 | US 1999-257795 | A2 19990225 |
| US 6306544 | B1 | 20011023 | US 1999-257795 | 19990225 |
| JP 2000251898 | A2 | 20000914 | JP 2000-49516 | 20000225 |
| | | | US 1999-257795 | A 19990225 |

AB Cobalt-based alloys are provided for use as a pos. electrode current collector in a solid cathode, nonaq. liquid electrolyte, alkali metal anode active electrochem. cell. The cobalt-based alloys are characterized by chemical compatibility with aggressive cell environments, high corrosion resistance and resistance to fluorination and passivation at elevated temps., thus improving the longevity and performance of the electrochem. cell. The battery can be of either a primary or a secondary configuration.

IT 90076-65-6

RL: DEV (Device component use); USES (Uses)
(cobalt-based alloys as cathode current collectors in nonaq.

electrochem. cells)
RN 90076-65-6 CAPLUS
CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME)



● Li

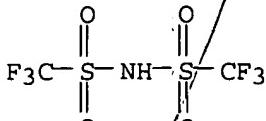
RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 124 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2000:553343 CAPLUS
DN 133:122818
TI Fabrication of chemical vapor deposited electrode component for batteries and capacitors
IN Muffoletto, Barry C.; Shah, Ashish; Nesselbeck, Neal
PA Wilson Greatbatch Ltd., USA
SO Eur. Pat. Appl., 12 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|------------|
| PI EP 1026762 | A1 | 20000809 | EP 2000-300977 | 20000208 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO | | | US 1999-119012P | P 19990208 |
| JP 2000228187 | A2 | 20000815 | JP 2000-30304 | 20000208 |
| | | | US 1999-119012P | P 19990208 |

AB An electrode component for an electrochem. cell is described wherein the electrode is produced by chemical vapor depositing an electrode active material onto a substrate to coat the substrate. The thus produced electrode is useful as a cathode in a primary electrochem. cell and as a cathode and an anode in a secondary cell, and as an electrode in an electrochem. capacitor and an electrolytic capacitor.

IT 90076-65-6
RL: DEV (Device component use); USES (Uses)
(fabrication of chemical vapor deposited electrode component for batteries and capacitors)
RN 90076-65-6 CAPLUS
CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME)



● Li

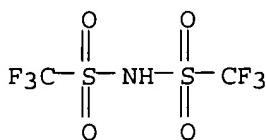
RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 125 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2000:529185 CAPLUS
DN 133:107451
TI Surface modifications for carbon lithium intercalation anodes
IN Tran, Tri D.; Kinoshita, Kimio
PA The Regents of the University of California, USA
SO U.S., 7 pp.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|----------------------------------|----------------------|
| PI US 6096454 | A | 20000801 | US 1998-144167
US 1998-144167 | 19980831
19980831 |

AB A prefabricated carbon anode containing predetd. amts. of passivating film components is assembled into a lithium-ion rechargeable battery. The modified carbon anode enhances the reduction of the irreversible capacity loss during the first discharge of a cathode-loaded cell. The passivating film components, such as Li₂O and Li₂CO₃, of a predetd. amount effective for optimal passivation of carbon, are incorporated into carbon anode materials to produce dry anodes that are essentially free of battery electrolyte prior to battery assembly.

IT 90076-65-6
RL: DEV (Device component use); USES (Uses)
(surface modifications for carbon lithium intercalation anodes)
RN 90076-65-6 CAPLUS
CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME)



● Li

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 126 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2000:367148 CAPLUS
DN 132:350275
TI Alkali metal electrochemical cell having an improved cathode activated

IN with a nonaqueous electrolyte having a passivation inhibitor additive
PA Takeuchi, Esther S.; Leising, Randolph A.; Gan, Hong
PA Wilson Greatbatch Ltd., USA
SO Eur. Pat. Appl., 18 pp.
CODEN: EPXXDW

DT Patent
LA English

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---------------|------|----------|--|---------------------------|
| PI | EP 1005098 | A2 | 20000531 | EP 1999-308910 | 19991109 |
| | EP 1005098 | A3 | 20020410 | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO | US 1998-200304 A 19981125 |
| | US 6221534 | B1 | 20010424 | US 1998-200304 | 19981125 |
| | JP 2000164251 | A2 | 20000616 | JP 1999-334319 | 19991125 |
| | | | | US 1998-200304 | A 19981125 |

OS MARPAT 132:350275

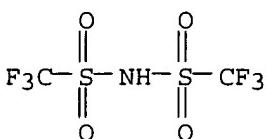
AB The present invention is directed to an unexpected benefit in a lithium cell which may be derived from using a combination of **silver** vanadium oxide prepared in a temperature range of 450° to 500° activated with a nonaq. electrolyte having a passivation inhibitor additive selected from a nitrite, a nitrate, a carbonate, a dicarbonate, a phosphonate, a phosphate, a sulfate and hydrogen fluoride, and mixts. thereof. The benefits may include addnl. battery life resulting from a reduction in voltage delay and RDC build-up. A preferred electrolyte is 1M LiAsF₆ in a 50:50 mixture, by volume, of PC and DME having dibenzyl carbonate added therein.

IT 90076-65-6

RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)
(alkali metal battery having improved cathode activated with nonaq. electrolyte having passivation inhibitor additive)

RN 90076-65-6 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-; lithium salt (9CI) (CA INDEX NAME)



● Li

L14 ANSWER 127 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2000:335071 CAPLUS

DN 132:334646

TI Process for manufacturing d,l- α -tocopherol

IN Bonrath, Werner; Wang, Shaoning

PA F. Hoffmann-La Roche A.-G., Switz.

SO Eur. Pat. Appl., 8 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

PATENT NO.

KIND DATE

APPLICATION NO.

DATE

| | | | | | |
|----|--|----|----------|-----------------------------------|------------------------|
| PI | EP 1000940 | A1 | 20000517 | EP 1999-121898 | 19991105 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO | | | | |
| | CA 2288851 | AA | 20000511 | EP 1998-121457
CA 1999-2288851 | A 19981111
19991105 |
| | IN 187780 | A | 20020622 | EP 1998-121457
IN 1999-MA1076 | A 19981111
19991108 |
| | KR 2000035335 | A | 20000626 | EP 1998-121457
KR 1999-49441 | A 19981111
19991109 |
| | CN 1253950 | A | 20000524 | EP 1998-121457
CN 1999-123521 | A 19981111
19991110 |
| | JP 2000143656 | A2 | 20000526 | EP 1998-121457
JP 1999-319283 | A 19981111
19991110 |
| | BR 9905319 | A | 20010417 | EP 1998-121457
BR 1999-5319 | A 19981111
19991110 |
| | US 2002010347 | A1 | 20020124 | EP 1998-121457
US 2001-932519 | A 19981111
20010817 |
| | US 6423851 | B2 | 20020723 | EP 1998-121457
US 1999-438711 | B1 19991111 |

OS CASREACT 132:334646

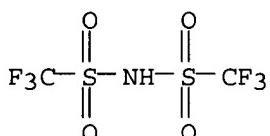
AB The manufacture of d,l- α -tocopherol by the catalyzed condensation of trimethylhydroquinone with isophytol comprises carrying out the condensation in the presence of bis-(trifluoromethylsulfonyl)amine, or a metal salt thereof of formula M[N(SO₂CF₃)₂]_n [M = metal; n = 1-4], in supercrit. carbon dioxide or nitrous oxide as the solvent. Thus, trimethylhydroquinone, isophytol and bis(trifluoromethanesulfonyl)amine in supercrit. carbon dioxide were mixed in a stainless steel autoclave and heated to 150°C at 85 bar to give dl- α -tocopherol in 84.23% yield.

IT 82113-65-3, Bis(trifluoromethylsulfonyl)amine

RL: CAT (Catalyst use); USES (Uses)
(preparation of d,l- α -tocopherol via trifluoromethanesulfonylamine catalyzed condensation)

RN 82113-65-3 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]- (9CI)
(CA INDEX NAME)



RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 128 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2000:256793 CAPLUS

DN 133:30610

TI The synthesis of D,L- α -tocopherol in supercritical media

AU Wang, Shaoning; Bonrath, Werner; Pauling, Horst; Kienzle, Frank

CS F. Hoffmann-La Roche Ltd., Basel, Switz.

SO Journal of Supercritical Fluids (2000), 17(2), 135-143

CODEN: JSFLEH; ISSN: 0896-8446

PB Elsevier Science B.V.

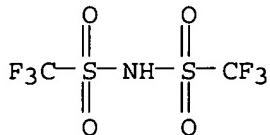
DT Journal

LA English

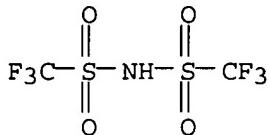
OS CASREACT 133:30610

AB The synthesis of D,L- α -tocopherol in supercrit. carbon dioxide or

nitrous oxide by condensation of trimethylhydroquinone (TMHQ) with
 isophytol (IP) in the presence of various Bronsted or Lewis acids, especially
 an imide or its metal salts, as catalysts is described. The product is
 obtained in high yield. The method represents an interesting alternative
 to existing processes. A quasi-reaction mechanism is being proposed
 together with kinetics, which are needed for the reactor anal. and design.
 IT 82113-65-3, Bis(trifluoromethanesulfonyl)amine 90076-65-6
 , Lithium bis(trifluoromethylsulfonyl)amide
 RL: CAT (Catalyst use); USES (Uses)
 (preparation of D,L- α -tocopherol in supercrit. media)
 RN 82113-65-3 CAPLUS
 CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]- (9CI)
 (CA INDEX NAME)



RN 90076-65-6 CAPLUS
 CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-,
 lithium salt (9CI) (CA INDEX NAME)



● Li

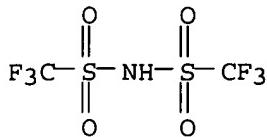
RE.CNT 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 129 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2000:215981 CAPLUS
 DN 132:236808
 TI Preparation of dicarboxylic acids
 IN Nakafuji, Takeshi; Onda, Atsushi; Ue, Makoto
 PA Mitsubishi Chemical Industries Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 4 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------|-------|----------|----------------------------------|----------------------|
| ----- | ----- | ----- | ----- | ----- |
| PI JP 2000095724 | A2 | 20000404 | JP 1998-272848
JP 1998-272848 | 19980928
19980928 |

OS CASREACT 132:236808
 AB Title compds. are prepared by reaction of unsatd. monocarboxylic acid esters
 with CO in the presence of monovalent Group IB metal compds. and acids and
 reaction with H₂O. Me oleate (7.4 g) was reacted with CO in the presence
 of H₂SO₄ and Cu₂O at room temperature for 1.5 h and treated with H₂O to give
 7.58 g C19 dicarboxylic acid mixture with 86% purity.

IT 82113-65-3, Bis(trifluoromethylsulfonyl)imide
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (preparation of dicarboxylic acids by Koch reaction of unsatd.
 monocarboxylic acids)
 RN 82113-65-3 CAPLUS
 CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]- (9CI)
 (CA INDEX NAME)



L14 ANSWER 130 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2000:129902 CAPLUS
 DN 132:168735
 TI Alkaline cells containing discharge-accelerating mixtures for minimized swelling
 IN Takeuchi, Esther S.; Thiebolt, William C., III
 PA Wilson Greatbatch Ltd., USA
 SO Jpn. Kokai Tokkyo Koho, 11 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 3

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---------------|------|----------|-----------------|------------|
| PI | JP 2000058064 | A2 | 20000225 | JP 1998-236470 | 19980807 |
| | US 5807645 | A | 19980915 | US 1997-878040 | A 19970618 |
| | | | | US 1997-878040 | 19970618 |

PATENT FAMILY INFORMATION:

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|--|------|----------|-----------------|------------|
| PI | US 5807645 | A | 19980915 | US 1997-878040 | 19970618 |
| | EP 978889 | A1 | 20000209 | EP 1998-305864 | 19980723 |
| | EP 978889 | B1 | 20031008 | | |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO | | | | |
| | AU 9878590 | A1 | 19981224 | US 1997-878040 | A 19970618 |
| | | | | AU 1998-78590 | 19980729 |
| | | | | US 1997-878040 | A 19970618 |
| | JP 2000058064 | A2 | 20000225 | JP 1998-236470 | 19980807 |
| | | | | US 1997-878040 | A 19970618 |

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|--|------|----------|-----------------|------------|
| PI | EP 978889 | A1 | 20000209 | EP 1998-305864 | 19980723 |
| | EP 978889 | B1 | 20031008 | | |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO | | | | |
| | US 5807645 | A | 19980915 | US 1997-878040 | A 19970618 |
| | | | | US 1997-878040 | 19970618 |

AB Batteries comprising (a) an anode, which may be capable of intercalating alkali metals, (b) a cathode comprising graphite, ≥ 1 conductive carbonaceous diluent having surface area ≤ 100 g/m², and cathode active material, and (c) an electrolyte which activates the electrodes is claimed. The graphite-diluent mixture in the cathode increases the charge transfer capability and minimizes swelling of the batteries during

discharging. Manufacture of the batteries by placing an anode in a casing, placing the cathode in the casing, and filling the casing with an electrolyte is also claimed. Electrodes comprising of active material, graphite, and the conductive carbonaceous diluent, and their manufacture are also claimed. Nonswelling batteries with high performance, suitable as implant batteries, are obtained.

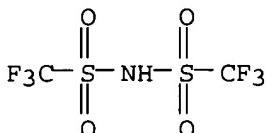
IT 90076-65-6

RL: DEV (Device component use); USES (Uses)

(electrolyte; alkaline batteries with graphite cathodes containing conductive carbonaceous diluents for nonswelling)

RN 90076-65-6 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME)



● Li

L14 ANSWER 131 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2000:116839 CAPLUS

DN 132:139849

TI Primary or secondary lithium battery useful in the vicinity of strong magnetic fields of a magnetic resonance imaging machine

IN Takeuchi, Esther S.

PA Wilson Greatbatch Ltd., USA

SO Eur. Pat. Appl., 8 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|--|------|----------|-----------------|------------|
| PI | EP 980105 | A1 | 20000216 | EP 1999-306342 | 19990811 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO | | | US 1998-132634 | A 19980811 |
| | JP 2000058132 | A2 | 20000225 | JP 1999-223414 | 19990806 |
| | | | | US 1998-132634 | A 19980811 |

AB An electrochem. cell that is useful in the vicinity of the strong magnetic fields of a magnetic resonance imaging machine is described. The cell can be a primary or a secondary system having lithium as an anode active material. A preferred couple is Li/CF_x housed in a titanium casing with a titanium internal cell components.

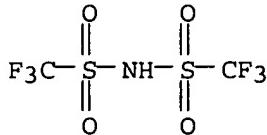
IT 90076-65-6

RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)

(primary or secondary lithium battery useful in vicinity of strong magnetic fields of magnetic resonance imaging machine)

RN 90076-65-6 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME)



● Li

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 132 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2000:98190 CAPLUS
 DN 132:125356
 TI Conductive additive and discharge promotor mixture for reducing cell swelling in alkali metal electrochemical cells
 IN Takeuchi, Esther S.; Thiebolt, William C., III
 PA Wilson Greatbatch Ltd., USA
 SO Eur. Pat. Appl., 13 pp.
 CODEN: EPXXDW
 DT Patent
 LA English
 FAN.CNT 3

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|--|------|----------|-----------------|------------|
| PI | EP 978889 | A1 | 20000209 | EP 1998-305864 | 19980723 |
| | EP 978889 | B1 | 20031008 | | |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO | | | US 1997-878040 | A 19970618 |
| | US 5807645 | A | 19980915 | US 1997-878040 | 19970618 |

PATENT FAMILY INFORMATION:

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|--|------|----------|-----------------|------------|
| PI | US 5807645 | A | 19980915 | US 1997-878040 | 19970618 |
| | EP 978889 | A1 | 20000209 | EP 1998-305864 | 19980723 |
| | EP 978889 | B1 | 20031008 | | |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO | | | US 1997-878040 | A 19970618 |
| | AU 9878590 | A1 | 19981224 | AU 1998-78590 | 19980729 |
| | | | | US 1997-878040 | A 19970618 |
| | JP 2000058064 | A2 | 20000225 | JP 1998-236470 | 19980807 |
| | | | | US 1997-878040 | A 19970618 |

FAN 2000:129902

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---------------|------|----------|-----------------|------------|
| PI | JP 2000058064 | A2 | 20000225 | JP 1998-236470 | 19980807 |
| | | | | US 1997-878040 | A 19970618 |
| | US 5807645 | A | 19980915 | US 1997-878040 | 19970618 |

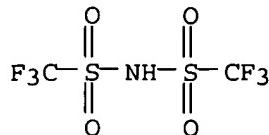
AB An electrode comprising acetylene black or carbon black carbonaceous diluent having a surface area less than about 100 m²/g mixed with graphite and a charge transfer active material to provide an electrode active admixt., is disclosed. The carbonaceous diluent/graphite blend increases the charge transfer capability within the electrode while exhibiting diminished cell swelling in comparison to high surface area carbonaceous diluents. A preferred carbonaceous diluent is Shawinigan Black carbon.

IT 90076-65-6
 RL: DEV (Device component use); USES (Uses)

(conductive additive and discharge promoter mixture for reducing cell swelling in alkali metal batteries)

RN 90076-65-6 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME)

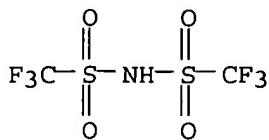


● Li

RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L14 ANSWER 133 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2000:68291 CAPLUS
DN 132:110619
TI Current collector with chemically machined design
IN Frysz, Christine A.; Frustaci, Dominick J.; Probst, Joseph M.; Thiebolt, William C., III; Paulot, William M.
PA Wilson Greatbatch Ltd., USA
SO Eur. Pat. Appl., 19 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1
- | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|--|----------|----------------------------------|------------------------|
| EP 975038 | A2 | 20000126 | EP 1999-305807 | 19990722 |
| EP 975038 | A3 | 20020619 | | |
| EP 975038 | B1 | 20050126 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO | | | | |
| US 6110622 | A | 20000829 | US 1998-120526 | A 19980722 |
| AU 9939142 | A1 | 20000217 | AU 1999-39142 | 19990709 |
| AU 756839 | B2 | 20030123 | | |
| JP 2000048824 | A2 | 20000218 | US 1998-120526
JP 1999-207275 | A 19980722
19990722 |
| AT 288136 | E | 20050215 | US 1998-120526
AT 1999-305807 | A 19980722
19990722 |
| US 6461771 | B1 | 20021008 | US 1998-120526
US 2000-597015 | A 19980722
20000620 |
| | | | US 1998-120526 | A3 19980722 |
| AB | A current collector comprises (1) a frame having a frame thickness defined by spaced apart first and second major surfaces of the current collector, (2) first structures extending to and meeting with the frame, wherein an outer surface of the first structures is substantially coplanar with the first major surface of the frame, and (3) second structures extending to and meeting with the frame, wherein an outer surface of the second structures is substantially coplanar with the second major surface of the frame, and wherein a thickness of the first and second structures is less than the frame thickness. | | | |
| IT | 90076-65-6, Lithium bis(trifluoromethanesulfonyl)imide
RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses) | | | |

(current collector with chemical machined design)
RN 90076-65-6 CAPLUS
CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME)



● Li

L14 ANSWER 134 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2000:65309 CAPLUS
DN 132:95805
TI Electrolyte for batteries having cathodes containing **silver** vanadium oxide
IN Crespi, Ann M.; Chen, Kevin
PA Medtronic, Inc., USA
SO U.S., 11 pp., Cont.-in-part of U.S. 5,766,797.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 2

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|------------|------|----------|-----------------|-------------|
| PI | US 6017656 | A | 20000125 | US 1997-943637 | 19971003 |
| | US 5766797 | A | 19980616 | US 1996-757220 | A2 19961127 |

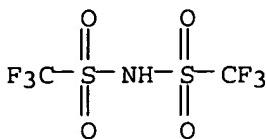
PATENT FAMILY INFORMATION:

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|------------|------|----------|-----------------|-------------|
| PI | US 5766797 | A | 19980616 | US 1996-757220 | 19961127 |
| | US 6017656 | A | 20000125 | US 1997-943637 | 19971003 |
| | | | | US 1996-757220 | A2 19961127 |

AB An electrochem. cell containing a cathode comprising **silver** vanadium oxide and an anode comprising lithium is disclosed that includes an improved electrolyte composition having the solvents propylene carbonate and 1,2-dimethoxyethane, and an addnl. third solvent that reduces the solubility of the composition of the **silver** vanadium cathode material. Preferably, the third solvent is a dialkyl carbonate such as di-Me carbonate, di-Et carbonate or ethylmethyl carbonate. The improved electrolyte composition reduces the build up of resistance in the cell during cell discharge, and may affect the cell's performance in implantable cardiac defibrillator applications. The cell of the present invention may include a hybrid cathode containing a mixture of **silver** vanadium oxide and carbon monofluoride.

IT 90076-65-6, Lithium bis(trifluoromethanesulfonyl)imide
RL: DEV (Device component use); USES (Uses)
(electrolyte for batteries having cathodes containing **silver** vanadium oxide)

RN 90076-65-6 CAPLUS
CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME)

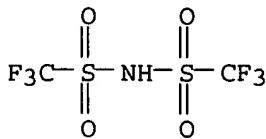


● Li

RE.CNT 48 THERE ARE 48 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 135 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2000:34689 CAPLUS
 DN 132:80952
 TI Inorganic and organic nitrate additives for nonaqueous electrolyte in alkali metal batteries
 IN Gan, Hong; Takuchi, Ester
 PA Wilson Greatbatch Ltd., USA
 SO Eur. Pat. Appl., 26 pp.
 CODEN: EPXXDW
 DT Patent
 LA English
 FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---|------|----------|-----------------|------------|
| PI | EP 971432 | A1 | 20000112 | EP 1999-305473 | 19990709 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO | | | US 1998-112597 | A 19980709 |
| | US 6060184 | A | 20000509 | US 1998-112597 | 19980709 |
| | AU 9939108 | A1 | 20000203 | AU 1999-39108 | 19990708 |
| | | | | US 1998-112597 | A 19980709 |
| | JP 2000040523 | A2 | 20000208 | JP 1999-195171 | 19990709 |
| | | | | US 1998-112597 | A 19980709 |
| OS | MARPAT 132:80952 | | | | |
| AB | A nonaq. alkali metal, solid cathode battery capable of delivering high current pulses, rapidly recovering its open circuit voltage and having high current capacity has ≥1 nitrate additive to an electrolyte comprising an alkali metal salt dissolved in a mixture of a low viscosity solvent and a high permittivity solvent. A preferred solvent mixture includes propylene carbonate, dimethoxyethane, and an alkali metal nitrate, alkaline earth metal nitrate, and/or an organic alkyl nitrate additive. | | | | |
| IT | 90076-65-6 | | | | |
| | RL: DEV (Device component use); USES (Uses)
(inorg. and organic nitrate additives for nonaq. electrolyte in alkali metal batteries) | | | | |
| RN | 90076-65-6 CAPLUS | | | | |
| CN | Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME) | | | | |



● Li

RE.CNT 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 136 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2000:31275 CAPLUS
 DN 132:52440
 TI Organic sulfate additives for nonaqueous electrolyte in alkali metal batteries
 IN Gan, Hong; Takuchi, Esther S.
 PA Wilson Greatbatch Ltd., USA
 SO U.S., 14 pp.
 CODEN: USXXAM

DT Patent
 LA English

FAN.CNT 6

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---------------|------|----------|--|---|
| PI | US 6013394 | A | 20000111 | US 1998-9557 | 19980120 |
| | US 6180283 | B1 | 20010130 | US 1999-460035 | 19991213 |
| | US 6265106 | B1 | 20010724 | US 1998-9557
US 2000-491355
US 1998-9557
US 1999-460035 | A 19980120
20000126
A2 19980120
A2 19991213 |
| | US 6350546 | B1 | 20020226 | US 2000-519534
US 1998-9557
US 1999-460035
US 2000-491355 | 20000306
A2 19980120
A2 19991213
A2 20000126 |
| | US 2001006751 | A1 | 20010705 | US 2001-772680 | 20010130 |
| | US 6444360 | B2 | 20020903 | US 1998-9557
US 1999-460035 | A2 19980120
A2 19991213 |

PATENT FAMILY INFORMATION:

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|------------|----------|----------------|---|---|
| PI | US 6180283 | B1 | 20010130 | US 1999-460035 | 19991213 |
| | US 6013394 | A | 20000111 | US 1998-9557 | A 19980120 |
| | US 6265106 | B1 | 20010724 | US 2000-491355
US 1998-9557
US 1999-460035 | 20000126
A2 19980120
A2 19991213 |
| | US 6350546 | B1 | 20020226 | US 2000-519534
US 1998-9557
US 1999-460035
US 2000-491355 | 20000306
A2 19980120
A2 19991213
A2 20000126 |
| | CA 2316438 | AA | 20010613 | CA 2000-2316438
US 1999-460035
US 2000-491355
US 2000-519534 | 20000818
A 19991213
A 20000126
A 20000306 |
| EP 1109244 | A2 | 20010620 | EP 2000-311118 | 20001213 | |
| EP 1109244 | A3 | 20020724 | | | |

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,

IE, SI, LT, LV, FI, RO

| | | | | | |
|---|-------|----------|--|------------------|-------------|
| | | | | US 1999-460035 | A 19991213 |
| | | | | US 2000-491355 | A 20000126 |
| | | | | US 2000-519534 | A 20000306 |
| JP 2001176548 | A2 | 20010629 | | JP 2000-378551 | 20001213 |
| | | | | US 1999-460035 | A 19991213 |
| | | | | US 2000-491355 | A 20000126 |
| | | | | US 2000-519534 | A 20000306 |
| TW 478201 | B | 20020301 | | TW 2000-89126603 | 20001213 |
| | | | | US 1999-460035 | A 19991213 |
| | | | | US 2000-491355 | A 20000126 |
| | | | | US 2000-519534 | A 20000306 |
| US 2001006751 | A1 | 20010705 | | US 2001-772680 | 20010130 |
| US 6444360 | B2 | 20020903 | | US 1998-9557 | A2 19980120 |
| | | | | US 1999-460035 | A2 19991213 |
| FAN 2001:451045 | | | | | |
| PATENT NO. | KIND | DATE | | APPLICATION NO. | DATE |
| ----- | ----- | ----- | | ----- | ----- |
| PI EP 1109244 | A2 | 20010620 | | EP 2000-311118 | 20001213 |
| EP 1109244 | A3 | 20020724 | | | |
| R: AT, BE, CH, DE, DK, ES, FR, IE, SI, LT, LV, FI, RO | | | | | |
| | | | | US 1999-460035 | A 19991213 |
| | | | | US 2000-491355 | A 20000126 |
| | | | | US 2000-519534 | A 20000306 |
| US 6180283 | B1 | 20010130 | | US 1999-460035 | 19991213 |
| US 6265106 | B1 | 20010724 | | US 1998-9557 | A 19980120 |
| US 6350546 | B1 | 20020226 | | US 2000-491355 | 20000126 |
| | | | | US 1999-460035 | A2 19991213 |
| | | | | US 2000-519534 | 20000306 |
| | | | | US 1998-9557 | A2 19980120 |
| | | | | US 1999-460035 | A2 19991213 |
| | | | | US 2000-491355 | A2 20000126 |
| FAN 2001:489871 | | | | | |
| PATENT NO. | KIND | DATE | | APPLICATION NO. | DATE |
| ----- | ----- | ----- | | ----- | ----- |
| PI US 2001006751 | A1 | 20010705 | | US 2001-772680 | 20010130 |
| US 6444360 | B2 | 20020903 | | | |
| | | | | US 1998-9557 | A2 19980120 |
| | | | | US 1999-460035 | A2 19991213 |
| US 6013394 | A | 20000111 | | US 1998-9557 | 19980120 |
| US 6180283 | B1 | 20010130 | | US 1999-460035 | 19991213 |
| | | | | US 1998-9557 | A 19980120 |
| FAN 2001:537410 | | | | | |
| PATENT NO. | KIND | DATE | | APPLICATION NO. | DATE |
| ----- | ----- | ----- | | ----- | ----- |
| PI US 6265106 | B1 | 20010724 | | US 2000-491355 | 20000126 |
| | | | | US 1998-9557 | A2 19980120 |
| | | | | US 1999-460035 | A2 19991213 |
| US 6013394 | A | 20000111 | | US 1998-9557 | 19980120 |
| US 6180283 | B1 | 20010130 | | US 1999-460035 | 19991213 |
| US 6350546 | B1 | 20020226 | | US 1998-9557 | A 19980120 |
| | | | | US 2000-519534 | 20000306 |
| | | | | US 1998-9557 | A2 19980120 |
| | | | | US 1999-460035 | A2 19991213 |
| | | | | US 2000-491355 | A2 20000126 |
| CA 2316438 | AA | 20010613 | | CA 2000-2316438 | 20000818 |
| | | | | US 1999-460035 | A 19991213 |
| | | | | US 2000-491355 | A 20000126 |
| | | | | US 2000-519534 | A 20000306 |
| EP 1109244 | A2 | 20010620 | | EP 2000-311118 | 20001213 |

EP 1109244 A3 20020724
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO

| | | | | |
|---------------|----|----------|------------------|------------|
| | | | US 1999-460035 | A 19991213 |
| | | | US 2000-491355 | A 20000126 |
| | | | US 2000-519534 | A 20000306 |
| JP 2001176548 | A2 | 20010629 | JP 2000-378551 | 20001213 |
| | | | US 1999-460035 | A 19991213 |
| | | | US 2000-491355 | A 20000126 |
| | | | US 2000-519534 | A 20000306 |
| TW 478201 | B | 20020301 | TW 2000-89126603 | 20001213 |
| | | | US 1999-460035 | A 19991213 |
| | | | US 2000-491355 | A 20000126 |
| | | | US 2000-519534 | A 20000306 |

FAN 2002:153669

PATENT NO.

KIND DATE APPLICATION NO. DATE

| | | | | |
|---------------|----|----------|-----------------|-------------|
| PI US 6350546 | B1 | 20020226 | US 2000-519534 | 20000306 |
| | | | US 1998-9557 | A2 19980120 |
| | | | US 1999-460035 | A2 19991213 |
| | | | US 2000-491355 | A2 20000126 |
| US 6013394 | A | 20000111 | US 1998-9557 | 19980120 |
| US 6180283 | B1 | 20010130 | US 1999-460035 | 19991213 |
| US 6265106 | B1 | 20010724 | US 1998-9557 | A 19980120 |
| | | | US 2000-491355 | 20000126 |
| | | | US 1998-9557 | A2 19980120 |
| | | | US 1999-460035 | A2 19991213 |
| CA 2316438 | AA | 20010613 | CA 2000-2316438 | 20000818 |
| | | | US 1999-460035 | A 19991213 |
| | | | US 2000-491355 | A 20000126 |
| | | | US 2000-519534 | A 20000306 |
| EP 1109244 | A2 | 20010620 | EP 2000-311118 | 20001213 |
| EP 1109244 | A3 | 20020724 | | |

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO

| | | | | |
|---------------|----|----------|------------------|------------|
| | | | US 1999-460035 | A 19991213 |
| | | | US 2000-491355 | A 20000126 |
| | | | US 2000-519534 | A 20000306 |
| JP 2001176548 | A2 | 20010629 | JP 2000-378551 | 20001213 |
| | | | US 1999-460035 | A 19991213 |
| | | | US 2000-491355 | A 20000126 |
| | | | US 2000-519534 | A 20000306 |
| TW 478201 | B | 20020301 | TW 2000-89126603 | 20001213 |
| | | | US 1999-460035 | A 19991213 |
| | | | US 2000-491355 | A 20000126 |
| | | | US 2000-519534 | A 20000306 |

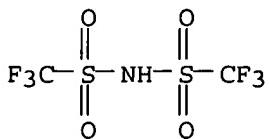
AB An alkali metal, solid cathode, nonaq. electrochem. cell capable of delivering high current pulses, rapidly recovering its open circuit voltage and having high current capacity, is disclosed. The stated benefits are realized by the addition of at least one organic sulfate additive to an electrolyte comprising an alkali metal salt dissolved in a mixture of a low viscosity solvent and a high permittivity solvent. A preferred solvent mixture includes propylene carbonate, dimethoxyethane and a dialkyl sulfate additive.

IT 90076-65-6

RL: DEV (Device component use); USES (Uses)
(organic sulfate additives for nonaq. electrolyte in alkali metal batteries)

RN 90076-65-6 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME)



● Li

RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 137 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1999:537926 CAPLUS
DN 131:170756
TI Polymerizable compositions comprising hydrocarbon monomers and bisimine ligand catalysts
IN Brown, Katherine A.; Stewart, Edward G.; Swanson, Penelope J.; Lamanna, William M.; Siedle, Allen R.
PA Minnesota Mining and Manufacturing Co., USA
SO U.S., 19 pp., Cont.-in-part of U. S. Ser. No. 591,449, abandoned.
CODEN: USXXAM
DT Patent
LA English

| FAN.CNT 2 | | | | |
|--|------------|------|----------|--|
| PATENT NO. | | KIND | DATE | APPLICATION NO. |
| ----- | | | | |
| PI | US 5942461 | A | 19990824 | US 1996-637727
US 1995-591449
WO 1996-US5227 |
| | | | | B2 19951106
W 19960415 |
| WO | 9717380 | A2 | 19970515 | WO 1996-US5227 |
| WO | 9717380 | A3 | 19970626 | 19960415 |
| W: CA, JP, KR, US | | | | |
| RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| US 1995-591449 A2 19951106 | | | | |
| WO 1995-US14240 A 19951106 | | | | |
| US | 2001008925 | A1 | 20010719 | US 2001-779680
US 1995-591449
US 1996-637727
US 1999-271817 |
| | | | | B2 19951106
A3 19960415
B3 19990318 |

PATENT FAMILY INFORMATION:

| FAN | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-----|--|-------------------|----------|-----------------|-----------------|
| PI | WO 9717380 | A2 | 19970515 | WO 1996-US5227 | 19960415 |
| | WO 9717380 | A3 | 19970626 | | |
| | W: CA, JP, KR, US | | | | |
| | RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | US 1995-591449 | A2 19951106 |
| | | | | WO 1995-US14240 | A 19951106 |
| CA | 2236817 | AA | 19970515 | CA 1996-2236817 | 19960415 |
| | | | | WO 1995-US14240 | A 19951106 |
| EP | 859799 | A2 | 19980826 | EP 1996-912789 | 19960415 |
| | | R: DE, FR, GB, IT | | | WO 1995-US14240 |
| | | | | WO 1996-US5227 | W 19960415 |
| US | 5942461 | A | 19990824 | US 1996-637727 | 19960415 |
| | | | | US 1995-591449 | B2 19951106 |
| | | | | WO 1996-US5227 | W 19960415 |
| JP | 2001524134 | T2 | 20011127 | JP 1997-518142 | 19960415 |
| | | | | WO 1995-US14240 | W 19951106 |

OS MARPAT 131:170756

AB A polymerizable composition consists essentially of: (a) ≥ 1 hydrocarbon monomer selected from (1) an α -olefin, (2) ethylene, and (3) cyclopentene, optionally, further ≥ 1 comonomer selected from alkyl acrylates and methacrylates, and acrylic and methacrylic acids and salts thereof, (b) one or both of water and air, and (c) an effective amount of an organometallic catalyst comprising a bisimine palladium or nickel complex having bulky substituents on the imine nitrogen, which substituents have steric bulk sufficient to permit formation of high polymer. 1-Octene was polymerized in the presence of $[[2,6\text{-C}_6\text{H}_3(\text{i-Pr})_2]\text{NC}(\text{CH}_3)\text{C}(\text{CH}_3)=\text{N}[2,6\text{C}_6\text{H}_3(\text{i-Pr})_2]]\text{Pd}(\text{CH}_3)\text{Cl}$ and $\text{Ag}(\text{toluene})\text{3B}(\text{C}_6\text{F}_5)_4$.

IT 191101-52-7P 191101-55-0P 191101-57-2P

191101-59-4P

RL: CAT (Catalyst use); IMF (Industrial manufacture); PREP (Preparation); USES (Uses)

(polymerizable compns. comprising α -olefin hydrocarbon monomers and bisimine ligand catalysts)

RN 191101-52-7 CAPLUS

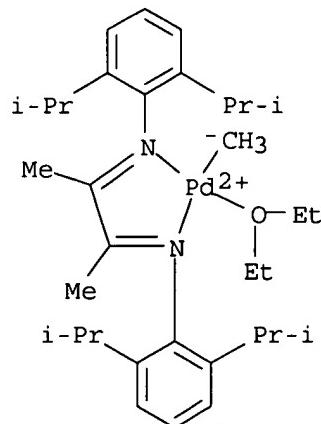
CN Palladium(1+), $[\text{N},\text{N}'-(1,2\text{-dimethyl-1,2-ethanediylidene})\text{bis}[2,6\text{-bis}(1\text{-methylethyl})\text{benzenamine-}\kappa\text{N}]]\text{methyl}[1,1'\text{-oxybis[ethane]}]^-$, (SP-4-2)-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 163893-66-1

CMF C33 H53 N2 O Pd

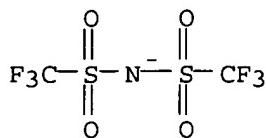
CCI CCS



CM 2

CRN 98837-98-0

CMF C2 F6 N O4 S2



RN 191101-55-0 CAPLUS

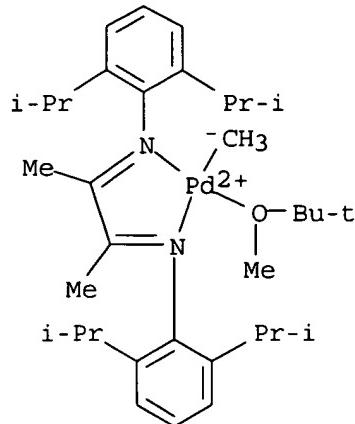
CN Palladium(1+), [N,N'-(1,2-dimethyl-1,2-ethanediylidene)bis[2,6-bis(1-methylethyl)benzenamine- κ N]] [2-(methoxy- κ O)-2-methylpropane]methyl-, (SP-4-2)-, salt with 1,1,2,2,2-pentafluoro-N-[(pentafluoroethyl)sulfonyl]ethanesulfonamide (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 191101-49-2

CMF C34 H55 N2 O Pd

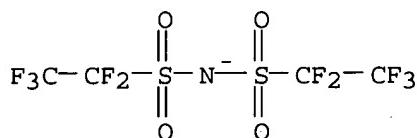
CCI CCS



CM 2

CRN 129318-46-3

CMF C4 F10 N O4 S2



RN 191101-57-2 CAPLUS

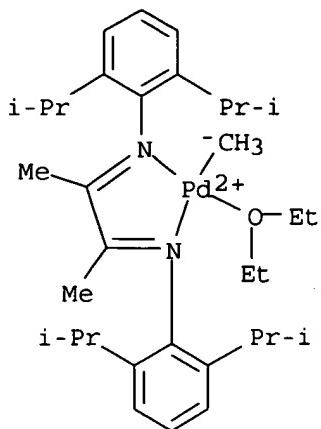
CN Palladium(1+), [N,N'-(1,2-dimethyl-1,2-ethanediylidene)bis[2,6-bis(1-methylethyl)benzenamine- κ N]]methyl[1,1'-oxybis[ethane]]-, (SP-4-2)-, salt with 1,1,2,2,2-pentafluoro-N-[(pentafluoroethyl)sulfonyl]ethanesulfonamide (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 163893-66-1

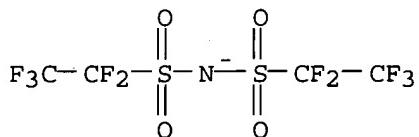
CMF C33 H53 N2 O Pd

CCI CCS



CM 2

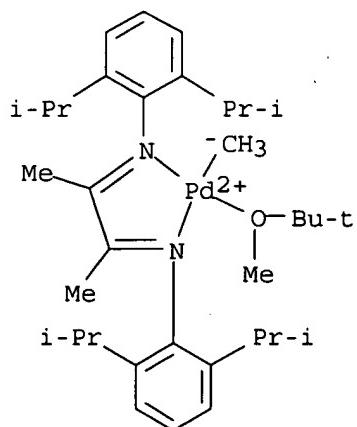
CRN 129318-46-3
CMF C4 F10 N O4 S2



RN 191101-59-4 CAPLUS
 CN Palladium(1+), [N,N'-(1,2-dimethyl-1,2-ethanediylidene)bis[2,6-bis(1-methylethyl)benzenamine- κ N]] [2-(methoxy- κ O)-2-methylpropane]methyl-, (SP-4-2)-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

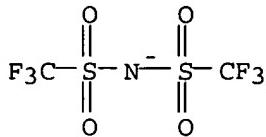
CM 1

CRN 191101-49-2
CMF C34 H55 N2 O Pd
CCI CCS



CM 2

CRN 98837-98-0
CMF C2 F6 N O4 S2



RE.CNT 46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 138 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1999:460327 CAPLUS

DN 131:90259

TI Use of double cells to power an implantable medical device

IN Can, Hong; Takeuchi, S. Esther

PA Wilson Greatbatch Ltd., USA

SO Eur. Pat. Appl., 7 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|--|------|----------|-----------------|------------|
| PI | EP 930665 | A2 | 19990721 | EP 1998-309397 | 19981117 |
| | EP 930665 | A3 | 20020821 | | |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO | | | US 1998-8469 | A 19980116 |
| | JP 11283679 | A2 | 19991015 | JP 1999-5076 | 19990112 |
| | | | | US 1998-8469 | A 19980116 |

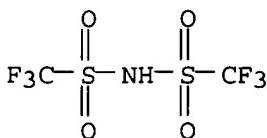
AB A power source including two alkali metal/transition metal oxide cells discharged in parallel to power an implantable medical device is disclosed. The first cell powers the medical device in both a device monitoring mode, for example in a cardiac defibrillator for monitoring the heart beat, and a device actuation mode for charging capacitors requiring high rate elec. pulse discharging. At such time as the first cell is discharged to a predetd. voltage limit, the first cell is disconnected from pulse discharge duty and only used for the device monitoring function. At that time, the second cell is utilized for the high rate elec. pulse discharging function. When the first cell reaches 100% efficiency or a present voltage limit, the second cell then takes over both device monitoring and device actuation functions. In that manner, a greater average discharge efficiency is realized from the two cells than is capable of being delivered from a single cell of similar chemical

IT 82113-65-3

RL: DEV (Device component use); USES (Uses)
(use of double cells to power implantable medical device)

RN 82113-65-3 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]- (9CI)
(CA INDEX NAME)



L14 ANSWER 139 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1999:460326 CAPLUS

DN 131:90258

TI Control of swelling in alkali metal batteries

IN Gan, Hong; Takeuchi, S. Esther

PA Wilson Greatbatch Ltd., USA

SO Eur. Pat. Appl., 15 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|-------------|------|----------|--|-------------------------|
| PI | EP 930664 | A2 | 19990721 | EP 1998-308677 | 19981023 |
| | EP 930664 | A3 | 20020814 | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO | US 1998-2534 A 19980102 |
| | AU 9894144 | A1 | 19990722 | AU 1998-94144 | 19981125 |
| | AU 743438 | B2 | 20020124 | US 1998-2534 A 19980102 | JP 1998-377178 19981229 |
| | JP 11265722 | A2 | 19990928 | US 1998-2534 A 19980102 | |

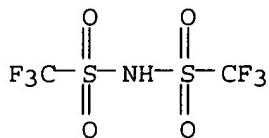
AB An alkali metal/solid cathode electrochem. cell, particularly a Li/Ag2V4O11 cell, having an anode-to-cathode capacity ratio of about 0.68 to about 0.96, is disclosed. This provides the cell with negligible, if any, cell swelling during discharge.

IT 90076-65-6, Lithium bis(trifluoromethanesulfonyl)imide

RL: DEV (Device component use); USES (Uses)
(control of swelling in alkali metal batteries)

RN 90076-65-6 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME)



● Li

L14 ANSWER 140 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1999:415938 CAPLUS

DN 131:150603

TI Imidazolium ionic liquids, EMIIIm vs. EMIBeti: electrochemical stability on glassy carbon, aluminum, and the stainless steels 316 and 304

AU Goldman, Jay L.; McEwen, Alan B.

CS Covalent Associates, Inc., Woburn, MA, 01801, USA

SO Proceedings - Electrochemical Society (1999), 98-15(Selected Battery Topics), 507-519

CODEN: PESODO; ISSN: 0161-6374

PB Electrochemical Society

DT Journal

LA English

AB The electrochem. stability of the ionic liqs. EMIIIm and EMIBeti on several electrode materials was determined. The purpose of the study was to compare

anion effects in a solvent free system. The EMIBeti ionic liquid is 0.2 V more stable on glassy carbon, likely due to the decreased basicity of the anion. With cycling to pos. potentials in either ionic liquid, aluminum formed a passivation layer while the stainless steels underwent both passivation and corrosion. The stainless steel 304 is less stable than the 316 alloy. In contrast to the lithium salt analogs in propylene carbonate (PC), low corrosion currents (<1 μ A/cm² at 30 min.) were observed in these ionic liqs. at 2.2 V vs. Ag (5.2 V vs. Li/Li⁺). With the addition of 10 weight percent PC to EMIIIm, however, a large corrosion current at 1.2 V vs Ag is observed, consistent with previous reports.

IT 174899-82-2 216299-76-2

RL: PRP (Properties)

(electrochem. stability on glassy carbon, aluminum, and the stainless steels 316 and 304)

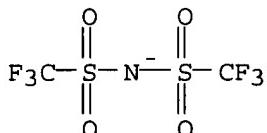
RN 174899-82-2 CAPLUS

CN 1H-Imidazolium, 1-ethyl-3-methyl-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 98837-98-0

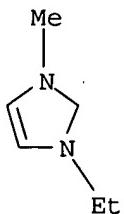
CMF C2 F6 N O4 S2



CM 2

CRN 65039-03-4

CMF C6 H11 N2



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

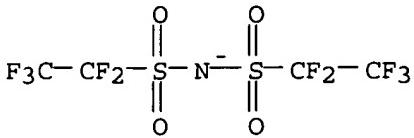
RN 216299-76-2 CAPLUS

CN 1H-Imidazolium, 1-ethyl-3-methyl-, salt with 1,1,2,2,2-pentafluoro-N-[(pentafluoroethyl)sulfonyl]ethanesulfonamide (1:1) (9CI) (CA INDEX NAME)

CM 1

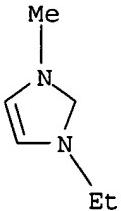
CRN 129318-46-3

CMF C4 F10 N O4 S2



CM 2

CRN 65039-03-4
CMF C6 H11 N2



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 141 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1999:380961 CAPLUS
DN 131:7559
TI Phosphonate additives for nonaqueous electrolyte in alkali metal batteries
IN Gan, Hong; Takeuchi, Esther S.
PA Wilson Greatbatch Ltd., USA
SO Eur. Pat. Appl., 15 pp.
CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

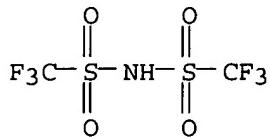
| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|--|------|----------|-----------------|-------------------------|
| PI | EP 917224 | A1 | 19990519 | EP 1998-308689 | 19981023 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO | | | | |
| US | 6096447 | A | 20000801 | US 1997-964492 | A 19971105 |
| AU | 9891336 | A1 | 19990527 | US 1997-964492 | AU 1998-91336 19981104 |
| | | | | US 1997-964492 | A 19971105 |
| JP | 11219711 | A2 | 19990810 | JP 1998-313255 | JP 1998-313255 19981104 |
| | | | | US 1997-964492 | A 19971105 |

AB An alkali metal, solid cathode, nonaq. battery capable of delivering high current pulses, rapidly recovering its open circuit voltage and having high current capacity, is disclosed. The stated benefits are realized by the addition of at least one phosphonate additive to an electrolyte comprising an alkali metal salt dissolved in a mixture of a low viscosity solvent and a high permittivity solvent. A preferred solvent mixture includes propylene carbonate, dimethoxyethane and an alkyl phosphonate additive.

IT 90076-65-6

RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)
(phosphonate additives for nonaq. electrolyte in alkali metal batteries)

RN 90076-65-6 CAPLUS
CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME)



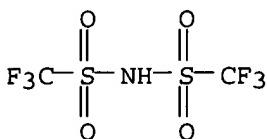
● Li

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 142 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1999:344830 CAPLUS
DN 130:340670
TI Phosphate additives for nonaqueous electrolyte in alkali metal electrochemical cells
IN Gan, Hong; Takeuchi, Esther S.
PA Wilson Greatbatch Ltd., USA
SO Eur. Pat. Appl., 28 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|-------------|
| PI EP 918364 | A1 | 19990526 | EP 1998-308674 | 19981023 |
| EP 918364 | B1 | 20020327 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO | | | | |
| US 6068950 | A | 20000530 | US 1997-974305 | A 19971119 |
| AU 9892438 | A1 | 19990610 | AU 1998-92438 | 19981117 |
| JP 11250919 | A2 | 19990917 | US 1997-974305 | A 19971119 |
| US 6274269 | B1 | 20010814 | JP 1998-328649 | 19981118 |
| | | | US 1997-974305 | A 19971119 |
| | | | US 2000-491399 | 20000125 |
| | | | US 1997-974305 | A3 19971119 |

AB An alkali metal, solid cathode, nonaq. electrochem. cell capable of delivering high current pulses, rapidly recovering its open circuit voltage and having high current capacity, is disclosed. The stated benefits are realized by the addition of at least one phosphate additive to an electrolyte comprising an alkali metal salt dissolved in a mixture of a low viscosity solvent and a high permittivity solvent. A preferred solvent mixture includes propylene carbonate, dimethoxyethane and an alkyl phosphate additive.
IT 90076-65-6, Lithium bis(trifluoromethanesulfonyl)imide
RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)
(phosphate additives for nonaq. electrolyte in alkali metal electrochem. cells)
RN 90076-65-6 CAPLUS
CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME)



● Li

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 143 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1999:316543 CAPLUS

DN 130:314423

TI Separator for nonaqueous batteries

IN Smesko, Sally Ann; Takeuchi, Esther S.

PA Wilson Greatbatch Ltd., USA

SO U.S., 13 pp.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|------------|------|----------|-----------------|----------|
| PI | US 5902696 | A | 19990511 | US 1997-867169 | 19970602 |
| | | | | US 1997-867169 | 19970602 |

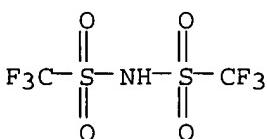
AB A combination separator comprising a single layer of a non-woven, polyolefinic cloth superposed with a single layer of a polyolefinic, microporous film for use in an electrochem. cell, is disclosed. A preferred polyolefinic material for both the non-woven cloth and the microporous film is polypropylene. The redundancy of using two layers of separator is an enhanced safety characteristic of the cell; however, the use of the polypropylene web/film combination adds another dimension to the cell's safety characteristics by imparting the benefits of each type of material.

IT 90076-65-6, Lithium bis(trifluoromethanesulfonyl)imide

RL: DEV (Device component use); USES (Uses)
(nonwoven polyolefinic cloth-single layer of polyolefinic microporous film separator for nonaq. batteries)

RN 90076-65-6 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME)



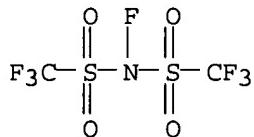
● Li

RE.CNT 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 144 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1999:248634 CAPLUS

DN 130:338073
 TI Chemical transformation of bis((perfluoroalkyl)sulfonyl)methanes and
 1,1,3,3-tetraoxopolyfluoro-1,3-dithiacycloalkanes
 AU Zhu, Shizheng; Xu, Guoling; Qin, Chaoyue; Yong, Xu; Qianli, Chu;
 DesMarteau, Darryl D.
 CS Shanghai Institute of Organic Chemistry, Chinese Academy of Sciences,
 Shanghai, 200032, Peop. Rep. China
 SO Heteroatom Chemistry (1999), 10(2), 147-152
 CODEN: HETCE8; ISSN: 1042-7163
 PB John Wiley & Sons, Inc.
 DT Journal
 LA English
 AB Halogenation of the potassium or silver salts of
 bis((trifluoromethyl)sulfonyl)methane (CF_3SO_2) $_2\text{CH}_2$ and its cyclo analogs
 $(\text{CF}_2)_n\text{SO}_2\text{CH}_2\text{SO}_2\text{CF}_2$ with N-fluorobis((trifluoromethyl)sulfonyl)imine
 (CF_3SO_2) $_2\text{NF}$, chlorine or bromine gave good yields of the corresponding
 α -halo disulfones (CF_3SO_2) $_2\text{CHX}$ and $(\text{CF}_2)_n\text{SO}_2\text{CHXSO}_2\text{CF}_2$ (X = F, Cl,
 Br; n = 1, 2). Some chemical transformations of these fluorinated
 α -halo-disulfones are described.
 IT 108388-06-3
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reactions of bis((perfluoroalkyl)sulfonyl)methanes and
 tetraoxopolyfluorodithiacycloalkanes)
 RN 108388-06-3 CAPLUS
 CN Methanesulfonamide, N,1,1,1-tetrafluoro-N-[(trifluoromethyl)sulfonyl]-
 (9CI) (CA INDEX NAME)



RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 145 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1998:795486 CAPLUS
 DN 130:95976
 TI Bis(cyclopentadienyl)titanium complexes as high-efficient polymerization
 catalysts and manufacture of poly(meth)acrylates using the catalysts
 IN Saegusa, Nobuya; Shiono, Takeshi; Ikeda, Tomiki; Mikami, Koichi
 PA Central Glass Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 8 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

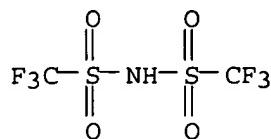
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----------------|------|----------|----------------------------------|----------------------|
| ----- | ---- | ----- | ----- | ----- |
| PI JP 10330391 | A2 | 19981215 | JP 1997-139521
JP 1997-139521 | 19970529
19970529 |

OS MARPAT 130:95976
 AB The polymers are manufactured by polymerization of (meth)acrylate esters in the
 presence of (A) bis(cyclopentadienyl)titanium complexes I (R1 = lower
 alkyl; R2, R3 = H, lower alkyl; X = halo) and AgN(SO₂CF₃)₂ or (B) I [R1-R3
 = same as above; X = OC(OR₉):CR₇R₈; R₇, R₈ = H, lower alkyl; R₉ = lower
 alkyl], and PhNHMe₂B(C₆F₅)₄, NH(SO₂CF₃)₂, or B(C₆F₅)₃. Me methacrylate
 was polymerized in the presence of I (R1 = R2 = R3 = Me, X = Cl) and
 AgN(SO₂CF₃)₂ at 30° for 48 h in MePh to give poly(Me methacrylate).
 IT 82113-65-3, Bis(trifluoromethanesulfonyl)amine

RL: CAT (Catalyst use); USES (Uses)
(catalyst aid; manufacture of poly(meth)acrylates in presence of
bis(cyclopentadienyl)titanium complexes as high-efficient polymerization
catalysts)

RN 82113-65-3 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]- (9CI)
(CA INDEX NAME)



L14 ANSWER 146 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1998:703515 CAPLUS

DN 129:291885

TI Dense alloyed anode metal sheet with internal stress compensation for
secondary batteries

IN Gauthier, Michel; Zaghrib, Karim; Armand, Michel; Poirier, Sylvain;
Bellemare, Roger

PA Hydro-Quebec, Can.

SO Eur. Pat. Appl., 27 pp.

CODEN: EPXXDW

DT Patent

LA French

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|--|------|----------|-----------------|------------|
| PI | EP 872902 | A1 | 19981021 | EP 1998-400913 | 19980414 |
| | EP 872902 | B1 | 20010110 | | |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO | | | CA 1997-2202604 | A 19970414 |
| | CA 2202604 | AA | 19981014 | CA 1997-2202604 | 19970414 |
| | CA 2202604 | C | 20001226 | | |
| | US 6265099 | B1 | 20010724 | US 1998-58895 | 19980413 |
| | | | | CA 1997-2202604 | A 19970414 |
| | JP 10308210 | A2 | 19981117 | JP 1998-103020 | 19980414 |
| | | | | CA 1997-2202604 | A 19970414 |

AB Dense alloyed sheets are described for anodes for secondary batteries,
especially lithium secondary batteries, which compensate for internal stress
caused by expansion with alloying upon charging. The anode sheet contains
a host metal sheet having a thickness of 1-150 μm , e.g., from Al, C,
Sn, Pb, Ag, Si, Zn, Mg or their combinations. The dense host
metal sheet is put in contact with an alkali metal sheet, especially Li, for
alloying upon charging, e.g., forming Li-Al.

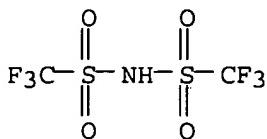
IT 90076-65-6, Lithium bis(trifluoromethanesulfonyl)imide

RL: NUU (Other use, unclassified); USES (Uses)

(dense anode alloy sheet with internal stress compensation for
secondary batteries)

RN 90076-65-6 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-,
lithium salt (9CI) (CA INDEX NAME)



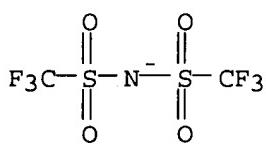
● Li

RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 147 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1998:483689 CAPLUS
 DN 129:252845
 TI Imidazolium room temperature molten salt systems
 AU Golding, J.; Macfarlane, D. R.; Forsyth, M.
 CS Department of Chemistry, Monash University, Clayton, 3168, Australia
 SO Molten Salt Forum (1998), 5-6(Molten Salt Chemistry and Technology 5),
 589-592
 CODEN: MOSFF2; ISSN: 1021-6138
 PB Trans Tech Publications Ltd.
 DT Journal
 LA English
 AB A series of imidazolium iodide salts have been synthesized from 1-benzyl,
 2-Me imidazole. The iodide counter ion was exchanged with the
 bis(trifluoromethanesulfonyl)amide anion, lowering the m.p. by approx. 100
 °C, in some cases to below room temperature. The conductivity and the phys.
 property trends of these 1-alkyl, 2-Me, 3-benzyl imidazolium iodide and
 bis(trifluoromethanesulfonyl)amide salts synthesized are reported.
 IT 211487-67-1 213011-04-2 213011-06-4
 213011-08-6 213011-10-0 213011-12-2
 RL: FMU (Formation, unclassified); PRP (Properties); FORM (Formation,
 nonpreparative)
 (conductivity and phys. property trends of)
 RN 211487-67-1 CAPLUS
 CN 1H-Imidazolium, 1-ethyl-2-methyl-3-(phenylmethyl)-, salt with
 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1)
 (9CI) (CA INDEX NAME)

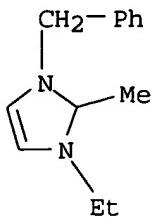
CM 1

CRN 98837-98-0
 CMF C2 F6 N O4 S2



CM 2

CRN 52462-01-8
 CMF C13 H17 N2



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

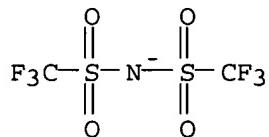
RN 213011-04-2 CAPLUS

CN 1H-Imidazolium, 1,2-dimethyl-3-(phenylmethyl)-, salt with
1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1)
(9CI) (CA INDEX NAME)

CM 1

CRN 98837-98-0

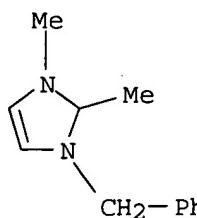
CMF C2 F6 N O4 S2



CM 2

CRN 52461-95-7

CMF C12 H15 N2



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

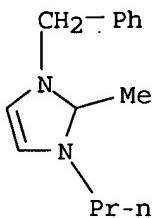
RN 213011-06-4 CAPLUS

CN 1H-Imidazolium, 2-methyl-1-(phenylmethyl)-3-propyl-, salt with
1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1)
(9CI) (CA INDEX NAME)

CM 1

CRN 213011-05-3

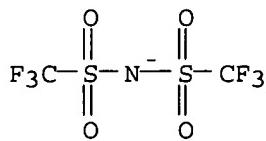
CMF C14 H19 N2



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 98837-98-0
CMF C2 F6 N O4 S2

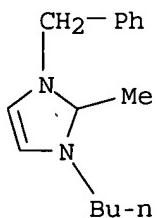


RN 213011-08-6 CAPLUS

CN 1H-Imidazolium, 1-butyl-2-methyl-3-(phenylmethyl)-, salt with
1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1)
(9CI) (CA INDEX NAME)

CM 1

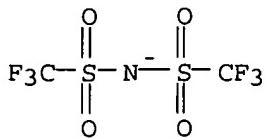
CRN 213011-07-5
CMF C15 H21 N2



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 98837-98-0
CMF C2 F6 N O4 S2



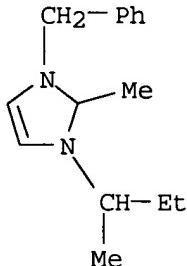
RN 213011-10-0 CAPLUS

CN 1H-Imidazolium, 2-methyl-1-(1-methylpropyl)-3-(phenylmethyl)-, salt with

1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1)
(9CI) (CA INDEX NAME)

CM 1

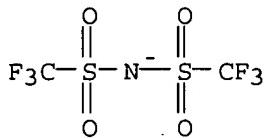
CRN 213011-09-7
CMF C15 H21 N2



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 98837-98-0
CMF C2 F6 N O4 S2

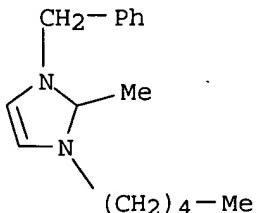


RN 213011-12-2 CAPLUS

CN 1H-Imidazolium, 2-methyl-1-pentyl-3-(phenylmethyl)-, salt with
1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1)
(9CI) (CA INDEX NAME)

CM 1

CRN 213011-11-1
CMF C16 H23 N2



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 98837-98-0
CMF C2 F6 N O4 S2

RE.CNT 8

THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 149 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1998:341555 CAPLUS
 DN 129:28106
 TI Process for manufacturing d,l- α -tocopherol via catalyzed condensation
 IN Baak, Marcel; Bonrath, Werner; Pauling, Horst
 PA F. Hoffmann-La Roche A.-G., Switz.
 SO PCT Int. Appl., 16 pp.
 CODEN: PIXXD2

DT Patent
 LA English

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---|------|----------|-----------------|------------|
| PI | WO 9821197 | A2 | 19980522 | WO 1997-EP6227 | 19971110 |
| | WO 9821197 | A3 | 19980723 | | |
| | W: CN, JP, KR
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | EP 1996-118037 | A 19961111 |
| | US 5908939 | A | 19990601 | US 1997-951273 | 19971016 |
| | | | | EP 1996-118037 | A 19961111 |
| | IN 183846 | A | 20000429 | IN 1997-MA2432 | 19971027 |
| | | | | EP 1996-118037 | A 19961111 |
| | EP 937055 | A2 | 19990825 | EP 1997-950150 | 19971110 |
| | EP 937055 | B1 | 20020403 | | |
| | R: BE, CH, DE, DK, ES, FR, GB, IT, LI, NL, SE, IE | | | EP 1996-118037 | A 19961111 |
| | | | | WO 1997-EP6227 | W 19971110 |
| | CN 1237163 | A | 19991201 | CN 1997-199633 | 19971110 |
| | CN 1105714 | B | 20030416 | | |
| | | | | EP 1996-118037 | A 19961111 |
| | JP 2001504111 | T2 | 20010327 | JP 1998-522153 | 19971110 |
| | | | | EP 1996-118037 | A 19961111 |
| | | | | WO 1997-EP6227 | W 19971110 |
| | ES 2173500 | T3 | 20021016 | ES 1997-950150 | 19971110 |
| | | | | EP 1996-118037 | A 19961111 |
| | KR 2000053181 | A | 20000825 | KR 1999-704139 | 19990510 |
| | | | | EP 1996-118037 | A 19961111 |

OS CASREACT 129:28106

AB A process for the manufacture of dl- α -tocopherol by the catalyzed condensation of trimethylhydroquinone with isophytol is described. The method comprises carrying out the condensation in the presence of bis-(trifluoromethylsulfonyl)amine [$\text{HN}(\text{SO}_2\text{CF}_3)_2$] or a metal salt thereof, of the formula $\text{M}[\text{N}(\text{SO}_2\text{CF}_3)_2]_n$ (I) [M = metal atom selected from the group of lithium, boron, magnesium, aluminum, silicon, scandium, titanium, vanadium, manganese, iron, cobalt, nickel, copper, zinc, yttrium, zirconium, rhodium, palladium, silver, tin, lanthanum, cerium, neodymium, praseodymium, europium, dysprosium, ytterbium, hafnium, platinum and gold; n = the corresponding valency (1, 2, 3 or 4) of the metal atom M], as the catalyst, or of a combination of a metal salt of formula I and a strong Bronsted acid as the catalyst system in an organic solvent. Thus, a mixture of trimethylhydroquinone, isophytol and bis-(trifluoromethylsulfonyl)amine in toluene are boiled at 140°C to give dl- α -tocopherol in 90% yield.

IT 82113-65-3, Bis-(trifluoromethylsulfonyl)amine 82113-65-3D

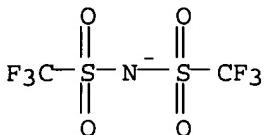
, rhodium complexes 90076-65-6, Lithium

bis(trifluoromethylsulfonyl)amide 207861-65-2

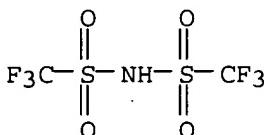
RL: CAT (Catalyst use); USES (Uses)

(preparation of dl- α -tocopherol via catalyzed condensation)

RN 82113-65-3 CAPLUS



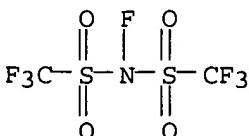
IT 90076-65-6, Lithium bis(trifluoromethanesulfonyl)imide
 RL: PRP (Properties); RCT (Reactant); RACT (Reactant or reagent)
 (synthesis of imidazolium iodide salts in solution of)
 RN 90076-65-6 CAPLUS
 CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-,
 lithium salt (9CI) (CA INDEX NAME)



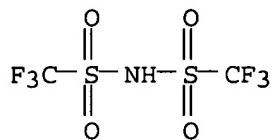
● Li

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 148 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1998:434983 CAPLUS
 DN 129:189283
 TI Preparation and reaction of bis(perfluoroalkanesulfonyl)methyl halides
 AU Zhu, Shi-Zheng; Xu, Guo-Lin; Qin, Chao-Yue; Xu, Yong; Chu, Qian-Li
 CS Shanghai Institute of Organic Chemistry, Chinese Academy of Sciences,
 Shanghai, 200032, Peop. Rep. China
 SO Chinese Journal of Chemistry (1998), 16(3), 264-271
 CODEN: CJOCEV; ISSN: 1001-604X
 PB Science Press
 DT Journal
 LA English
 OS CASREACT 129:189283
 AB Halogenation of the potassium or silver salts of
 bis(trifluoromethanesulfonyl)methane ($\text{CF}_3\text{SO}_2)_2\text{CH}_2$ and its cyclic analogs
 with N-fluoro-bis(trifluoromethanesulfonyl)imine [$(\text{CF}_3\text{SO}_2)_2\text{NF}$], chlorine
 or bromine gave good yields of the corresponding α -halo disulfone
 $(\text{CF}_3\text{SO}_2)_2\text{CHX}$ and cyclic analogs. The chemical transformation of these
 fluorinated α -halo-disulfones are described.
 IT 108388-06-3, N-Fluorobis(trifluoromethylsulfonyl)imide
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (preparation and reaction of bis(perfluoroalkanesulfonyl)methyl halides)
 RN 108388-06-3 CAPLUS
 CN Methanesulfonamide, N,1,1,1-tetrafluoro-N-[(trifluoromethyl)sulfonyl]-
 (9CI) (CA INDEX NAME)

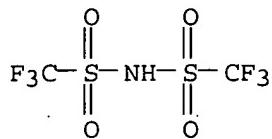


CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl] - (9CI)
(CA INDEX NAME)



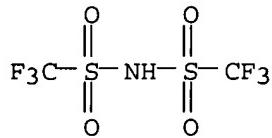
RN 82113-65-3 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl] - (9CI)
(CA INDEX NAME)



RN 90076-65-6 CAPLUS

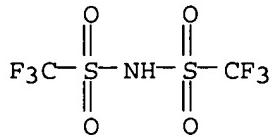
CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl] -,
lithium salt (9CI) (CA INDEX NAME)



● Li

RN 207861-65-2 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl] -,
tin(2+) salt (9CI) (CA INDEX NAME)



● 1/2 Sn(II)

L14 ANSWER 150 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1998:44690 CAPLUS

DN 128:115457

TI In situ conductivity studies of poly(3,4-ethylenedioxythiophene)

AU Morvant, Mark C.; Reynolds, John R.

CS Center for Macromolecular Science and Engineering, Department of
Chemistry, University of Florida, Gainesville, FL, 32611, USA

SO Synthetic Metals (1998), 92(1), 57-61
CODEN: SYMEDZ; ISSN: 0379-6779

PB Elsevier Science S.A.
DT Journal
LA English

AB We report the first *in situ* conductivity measurements of poly(3,4-ethylenedioxythiophene) (PEDOT), which was grown laterally on large gap lateral growth electrodes (gap distance 200 μm) to give relatively thick films (3.3-22.5 μm) with maximum *in situ* conductivities of 0.2-13.0 S/cm depending on growth conditions. PEDOT can be fully switched from its non-conductive state at -0.6 V to its fully conductive state at +0.1 V vs. Ag/Ag⁺. A negligible effect of solvent [PC (propylene carbonate), THF, and H₂O] and electrolyte [Li(CF₃SO₂)₂N, LiClO₄, LiBF₄, and TBAP (tetrabutylammonium perchlorate)] used during both electropolymerization and redox switching on the *in situ* conductivity of PEDOT demonstrates the versatility of using PEDOT as a conducting material under a wide variety of conditions. A negligible effect of solvent [PC (propylene carbonate), THF, and H₂O] and electrolyte [Li(CF₃SO₂)₂N, LiClO₄, LiBF₄, and TBAP (tetrabutylammonium perchlorate)] used during both electropolymerization and redox switching on the *in situ* conductivity of PEDOT demonstrates the versatility

of using PEDOT as a conducting material under a wide variety of conditions.

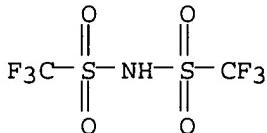
IT 90076-65-6

RL: NUU (Other use, unclassified); USES (Uses)

(*in situ* conductivity studies of poly(3,4-ethylenedioxythiophene) grown from different electrolytes and solvents)

RN 90076-65-6 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME)



● Li

RE.CNT 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 151 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1997:572314 CAPLUS

DN 127:248766

TI Single-ion and salt conductor polymer electrolytes based on poly(4-vinylpyridine) quaternized with poly(ethylene oxide) side chains

AU Chovino, Christian; Frere, Yves; Gramain, Philippe

CS Institut Charles Sadron (CRM-EAHP) (CNRS-ULP), Strasbourg, 67083, Fr.

SO Journal of Polymer Science, Part A: Polymer Chemistry (1997), 35(13), 2719-2728

CODEN: JPACEC; ISSN: 0887-624X

PB Wiley

DT Journal

LA English

AB A new type of single-ion conductor with fixed cation was synthesized by spontaneous anionic polymerization of 4-vinylpyridine in the presence of short polyethylene oxide (PEO) chains as alkylating agents. These comblike polymers have low Tgs and are amorphous with the shorter PEOs. Their

conductivities are unaffected by the nature of the anion (Br⁻, ClO₄⁻, and tosylate) and are controlled by the free volume and the mobility of the pendant cation. By comparison of the results at constant free volume, it is shown that the charge d. decreases with the increasing length of pendant PEO demonstrating that PEO acts only as a plasticizing agent. Best conductivity results ($\sigma = 10^{-5}$ S cm⁻¹ at 60°) are obtained with PEO side chains of mol. weight 350. With this sample, the conductivity in the presence of

various amts. of added salt (LiTFSI) was studied. A best value of 10⁻⁴ S cm⁻¹ at 60° is obtained with a molar ratio EO/Li of 10. It is shown that, over the range of examined concns. (0.2-1.3 mol Li kg⁻¹), the reduced conductivity σr/c increases linearly with increasing salt concentration

showing that the ion mobility increases continuously. Such behavior is quite unusual since in this concentration range a maximum is generally observed with

PEO systems. To interpret this result and by analogy with the behavior of this type of polymer in solution, it is proposed that the conformation of these polymers in the solid state is segregated with the P4VP skeleton more or less confined inside the dense coils surrounded by the PEO side chains. Under the influence of the increasing salt concentration, this microphase separation vanishes progressively: The LiTFSI salt exchanges with the tosylate anions and acts as a miscibility improver agent.

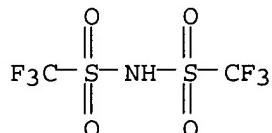
IT 90076-65-6

RL: MOA (Modifier or additive use); USES (Uses)
(dopant; preparation and conductivity of single-ion and salt conductor polymer

electrolytes based on polyoxyethylene-quaternized poly(vinylpyridine))

RN 90076-65-6 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME)



● Li

RE.CNT 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 152 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1997:515042 CAPLUS

DN 127:161598

TI Preparation of alcohols from aldehydes and olefins

IN Mikami, Koichi; Kodera, Osamu; Motoyama, Yukihiro; Maruta, Toshimichi; Sakaguchi, Hiroaki

PA Central Glass Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 13 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----------------|-------|----------|-----------------|----------|
| ----- | ----- | ----- | ----- | ----- |
| PI JP 09176063 | A2 | 19970708 | JP 1995-341333 | 19951227 |

JP 3031851

B2 20000410

JP 1995-341333

19951227

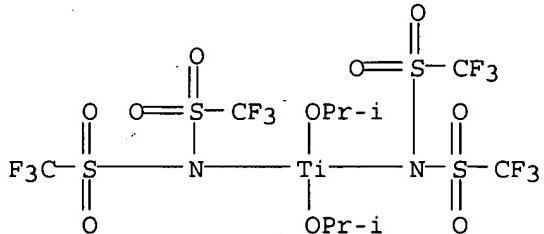
OS CASREACT 127:161598; MARPAT 127:161598
 AB HOCHR₃CH₂CR₄:CH₂ [R₃ = lower alkyl, (substituted) Ph, CO₂R₁₀; R₄ = H, lower alkyl, (substituted) Ph; R₁₀ = lower alkyl] are prepared by reaction of R₃CHO (R₃ = same as above) with CH₂:CR₄CH₂R₉ [R₄ = same as above; R₉ = H, Sn(R₁₁)₃; R₁₁ = lower alkyl] in the presence of R₁mR₂pMX_n [X = N(SO₂Rf₁)SO₂Rf₂; R₁, R₂ = (substituted) cyclopentadienyl, OR₅, N(SO₂Rf₃)R₆, N(SO₂Rf₄)SO₂Rf₅; Rf₁-Rf₅ = F, lower perfluoroalkyl; R₅, R₆ = lower alkyl; R₅ or R₆ on R₁ may form divalent group with R₅ or R₆ on R₂; M = alkali metal, alkaline earth metal, rare earth element, transition metal, B, Al, Ga, In, Tl, Si, Ge, Sn, Pb, As, Sb, Bi, Se, Te; m, p = 0, 1; n = (valence of M) - (m + p)], which are prepared by reaction of R₁mR₂pMX'_n [X' = halo, OR₁₃, O₂CR₁₄, O₃SR₁₅; R₁₃ = H, lower alkyl; R₁₄ = lower alkyl; R₁₅ = lower alkyl, (substituted) aryl; R₁, R₂, M, m, p, n = same as above] with M'X_y (X = same as above; M' = H, Ag, alkali metal, alkaline earth metal; y = valence of M'). PhCHO was treated with allyltributyltin in CH₂Cl₂ in the presence of Yb bis(trifluoromethanesulfonyl)imide at room temperature for 30 min to give 92% HOCHPhCH₂CH:CH₂.

IT 189114-57-6P 189114-64-5P 189114-73-6P
 189114-83-8P 189114-89-4P 192062-92-3P
 RL: CAT (Catalyst use); SPN (Synthetic preparation); PREP (Preparation);
 USES (Uses)

(preparation of metal perfluoroalkanesulfonylimides as catalysts for reaction of aldehydes with olefins)

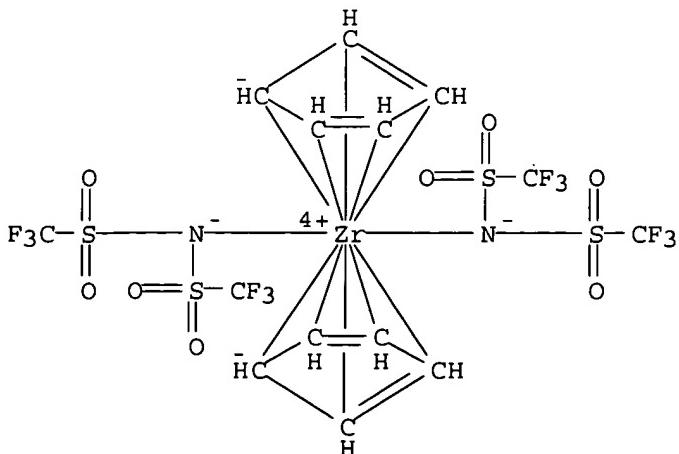
RN 189114-57-6 CAPLUS

CN Titanium, bis(2-propanolato)bis[1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamido- κ N]-, (T-4)- (9CI)
 (CA INDEX NAME)

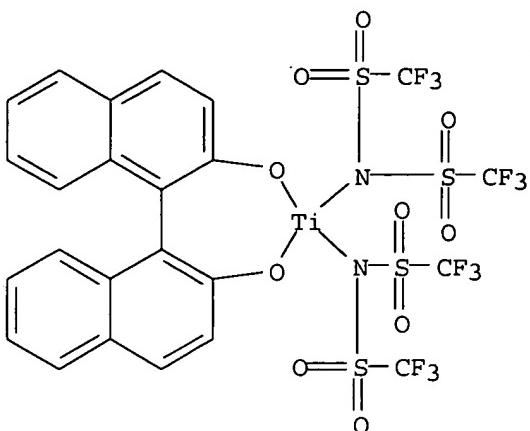


RN 189114-64-5 CAPLUS

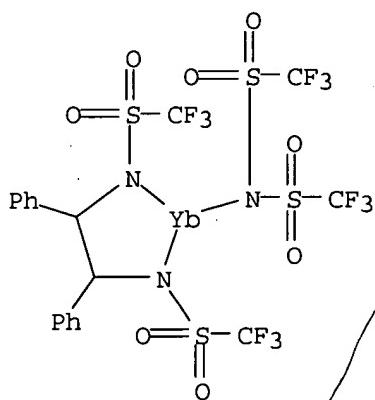
CN Zirconium, bis(η 5-2,4-cyclopentadien-1-yl)bis[1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamido- κ N]- (9CI) (CA INDEX NAME)



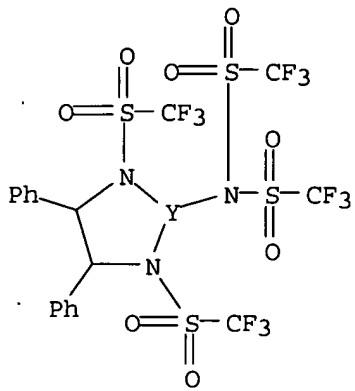
RN 189114-73-6 CAPLUS
CN Titanium, [[1,1'-binaphthalene]-2,2'-diolato(2-)-
κO,κO']bis[1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methan-
esulfonamido-κN]-, (T-4) - (9CI) (CA INDEX NAME)



RN 189114-83-8 CAPLUS
CN Ytterbium, [[N,N'-(1,2-diphenyl-1,2-ethanediyl)bis[1,1,1-
trifluoromethanesulfonamido-κN]](2-)][1,1,1-trifluoro-N-
[(trifluoromethyl)sulfonyl]sulfonamido-κN]- (9CI) (CA INDEX NAME)

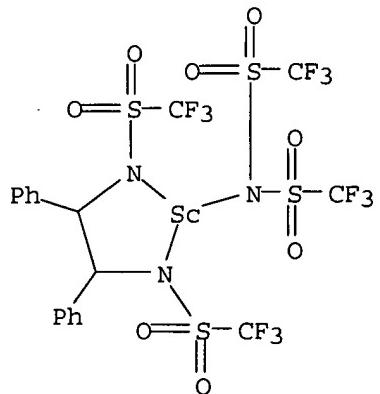


RN 189114-89-4 CAPLUS
CN Yttrium, [[N,N'-(1,2-diphenyl-1,2-ethanediyl)bis[1,1,1-
trifluoromethanesulfonamido-κN]](2-)][1,1,1-trifluoro-N-
[(trifluoromethyl)sulfonyl]sulfonamido-κN]- (9CI) (CA INDEX NAME)



RN 192062-92-3 CAPLUS

CN Scandium, [[N,N'-(1,2-diphenyl-1,2-ethanediyl)bis[1,1,1-trifluoromethanesulfonamido-κN]] (2-)] [1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamido-κN]- (9CI) (CA INDEX NAME)

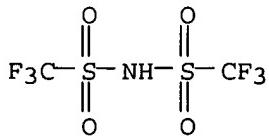


IT 82113-65-3, Bis(trifluoromethanesulfonyl)imide

RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of metal perfluoroalkanesulfonylimides as catalysts for reaction of aldehydes with olefins)

RN 82113-65-3 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]- (9CI) (CA INDEX NAME)



L14 ANSWER 153 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1997:461187 CAPLUS

DN 127:95088

TI Preparation of acyl compounds by acylation with acid anhydrides in the presence of metal compounds having bis(perfluoroalkanesulfonyl)amino group

IN Mikami, Koichi; Kodera, Osamu; Motoyama, Yukihiro; Maruta, Toshimichi; Sakaguchi, Hiroaki

PA Central Glass Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 17 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|-------------|------|----------|-----------------|----------|
| PI | JP 09169690 | A2 | 19970630 | JP 1995-333738 | 19951221 |
| | | | | JP 1995-333738 | 19951221 |

OS CASREACT 127:95088; MARPAT 127:95088

AB R4COR3 [R4 = lower alkyl; (un)substituted phenyl; R3 = p-C6H4OR9, OR10, NR11R12; R9 = lower alkyl, (un)substituted phenyl; R10 = lower alkyl, lower phenylalkyl, (un)substituted phenyl; R11-12 = H, lower alkyl, lower phenylalkyl, (un)substituted phenyl], useful as intermediates for drugs, agrochems., and functional materials, are prepared by treatment of R3H with (R4CO)2O in the presence of (R1)m(R2)pMXn [X = N(SO2RF1)(SO2RF2); RF1-2 = F, lower perfluoroalkyl; R1 = (un)substituted cyclopentadienyl, OR5, NR6SO2RF3, N(SO2RF4)(SO2RF5); R2 = (un)substituted cyclopentadienyl, OR7, NR8SO2RF6, N(SO2RF7)(SO2RF8); RF3-8 = F, lower perfluoroalkyl; R5-8 = lower alkyl; R5R7, R5R8, R6R7, or R6R8 may be divalent group; M = alkali metal, alkaline earth metal, rare earth metal, transition metal, B, Al, Ga, In, Tl, Si, Ge, Sn, Pb, As, Sb, Bi, Se, Te; m, p 0, 1; if m = 1 and p = 0 or m = 0 and p = 1, n = (valency of M) - 1; if m = p = 0, n = valency of M] or by in the presence of reaction products of (R1)m(R2)pMX'n [X' = OR13, OCOR14, OSO3R15; R13 = H, lower alkyl; R14 = lower alkyl; R15 = lower alkyl, (un)substituted aryl] with M'XY (M' = H, Ag, alkali metal, alkaline earth metal; if M = H, alkali metal, y = 1; if M = alkaline earth

metal, y = 2). A mixture of MeNO2, Ti(OPr-i)2[N(SO2CF3)2]2 (preparation given),

anisole, and Ac2O was stirred at room temperature for 1 h to give 86% 4-MeOC6H4COMe, while it took 18 h at 50° to obtain the product using ytterbium triflate as catalyst.

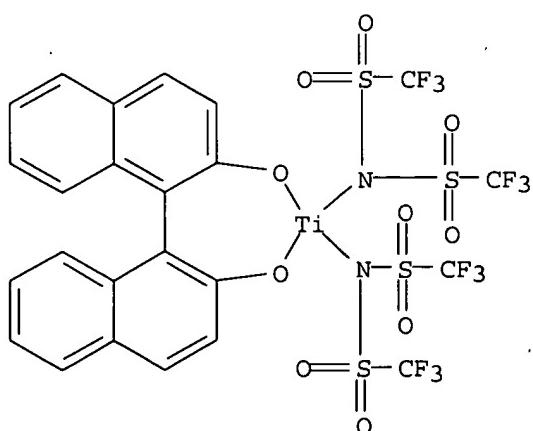
IT 189114-73-6P 189114-83-8P 189114-89-4P

192062-92-3P

RL: CAT (Catalyst use); IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(preparation of metal compds. having (perfluoroalkanesulfonyl)amino group and acylation of organic compds. with acid anhydrides using them)

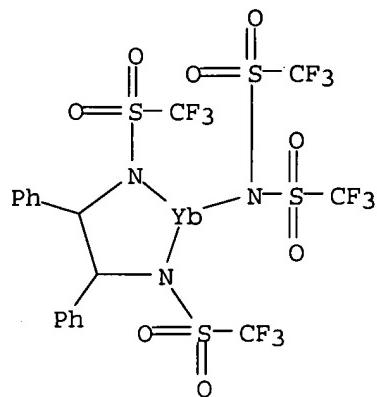
RN 189114-73-6 CAPLUS

CN Titanium, [[1,1'-binaphthalene]-2,2'-diolato(2-) -
κO,κO']bis[1,1,1-trifluoro-N-[trifluoromethyl]sulfonyl]methane
esulfonamidato-κN] -, (T-4) - (9CI) (CA INDEX NAME)



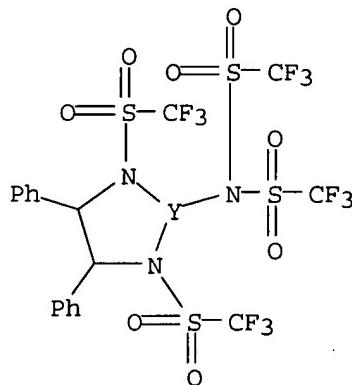
RN 189114-83-8 CAPLUS

CN Ytterbium, [[N,N'-(1,2-diphenyl-1,2-ethanediyl)bis[1,1,1-trifluoromethanesulfonamido- κ N]](2-)][1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]sulfonamido- κ N]- (9CI) (CA INDEX NAME)



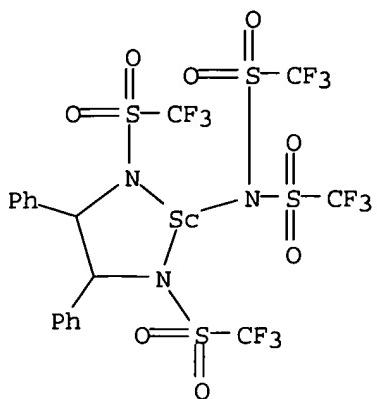
RN 189114-89-4 CAPLUS

CN Yttrium, [[N,N'-(1,2-diphenyl-1,2-ethanediyl)bis[1,1,1-trifluoromethanesulfonamido- κ N]](2-)][1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]sulfonamido- κ N]- (9CI) (CA INDEX NAME)



RN 192062-92-3 CAPLUS

CN Scandium, [[N,N'-(1,2-diphenyl-1,2-ethanediyl)bis[1,1,1-trifluoromethanesulfonamido- κ N]](2-)][1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamido- κ N]- (9CI) (CA INDEX NAME)

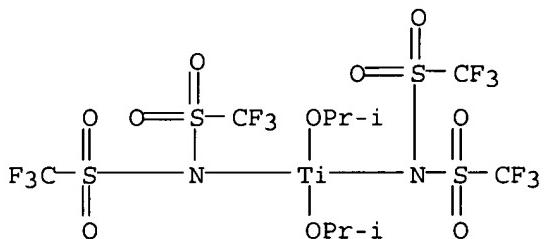


IT 189114-57-6P 189114-64-5P

RL: CAT (Catalyst use); IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
 (preparation of metal compds. having bis(perfluoroalkanesulfonyl)amino group and acylation of organic compds. with acid anhydrides using them)

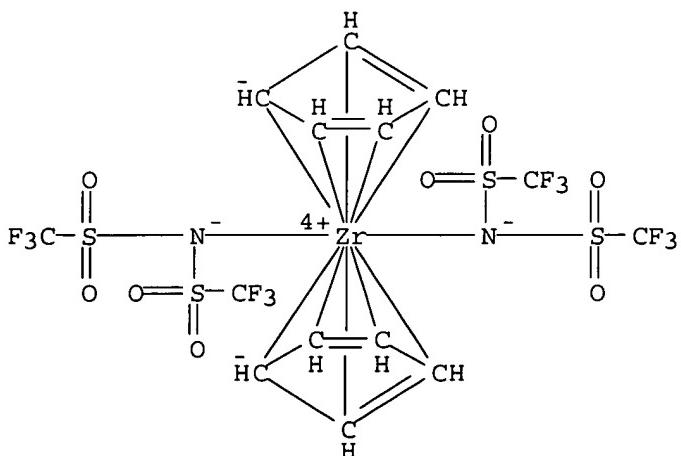
RN 189114-57-6 CAPLUS

CN Titanium, bis(2-propanolato)bis[1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamido-κN]-, (T-4)- (9CI)
 (CA INDEX NAME)



RN 189114-64-5 CAPLUS

CN Zirconium, bis(η⁵-2,4-cyclopentadien-1-yl)bis[1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamido-κN]- (9CI) (CA INDEX NAME)



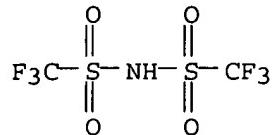
IT 82113-65-3

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of metal compds. having bis(perfluoroalkanesulfonyl)amino group
and acylation of organic compds. with acid anhydrides using them)

RN 82113-65-3 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]- (9CI)
(CA INDEX NAME)



L14 ANSWER 154 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1997:436065 CAPLUS

DN 127:51114

TI Polymerizable compositions comprising alpha-olefin hydrocarbon monomers
and methods of use therefor

IN Brown, Katherine A.; Lamanna, William M.; Siedle, Allen R.; Stewart,
Edward G.; Swanson, Penelope J.

PA Minnesota Mining and Manufacturing Company, USA; Brown, Katherine A.;
Lamanna, William M.; Siedle, Allen R.; Stewart, Edward G.; Swanson,
Penelope J.

SO PCT Int. Appl., 55 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 2

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|--|------|----------|-----------------|-------------|
| PI | WO 9717380 | A2 | 19970515 | WO 1996-US5227 | 19960415 |
| | WO 9717380 | A3 | 19970626 | | |
| | W: CA, JP, KR, US | | | | |
| | RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| | | | | US 1995-591449 | A2 19951106 |
| | | | | WO 1995-US14240 | A 19951106 |
| | CA 2236817 | AA | 19970515 | CA 1996-2236817 | 19960415 |
| | | | | WO 1995-US14240 | A 19951106 |
| | EP 859799 | A2 | 19980826 | EP 1996-912789 | 19960415 |
| | R: DE, FR, GB, IT | | | | |
| | | | | WO 1995-US14240 | W 19951106 |
| | | | | WO 1996-US5227 | W 19960415 |
| | US 5942461 | A | 19990824 | US 1996-637727 | 19960415 |
| | | | | US 1995-591449 | B2 19951106 |
| | | | | WO 1996-US5227 | W 19960415 |
| | JP 2001524134 | T2 | 20011127 | JP 1997-518142 | 19960415 |
| | | | | WO 1995-US14240 | W 19951106 |
| | | | | WO 1996-US5227 | W 19960415 |

PATENT FAMILY INFORMATION:

FAN 1999:537926

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|--|------|----------|-----------------|-------------|
| PI | US 5942461 | A | 19990824 | US 1996-637727 | 19960415 |
| | | | | US 1995-591449 | B2 19951106 |
| | WO 9717380 | A2 | 19970515 | WO 1996-US5227 | W 19960415 |
| | WO 9717380 | A3 | 19970626 | WO 1996-US5227 | 19960415 |
| | W: CA, JP, KR, US | | | | |
| | RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| | | | | US 1995-591449 | A2 19951106 |
| | | | | WO 1995-US14240 | A 19951106 |

US 2001008925

A1 20010719

US 2001-779680

20010208

US 1995-591449

B2 19951106

US 1996-637727

A3 19960415

US 1999-271817

B3 19990318

OS MARPAT 127:51114

AB High-mol.-weight polymers are manufactured by polymerization of alpha-olefins in the

presence of Group VIII metal complex with a polydentate ligand having steric bulk, and the polymerization is tolerant to water and air. Thus, a mixture

containing 26 g CH₂Cl₂, 260 mg complex formed from (1,5-cyclooctadienyl)methylpalladium chloride and the reaction product of 2,3-butanedione and 2,6-diisopropylaniline, 441 mg AgPh₃B(C₆F₅)₄, and 150 g propylene was shaken in a high-pressure reactor at -24°, and the reaction mixture was allowed to warm to room temperature over 4 h and left for

an addnl. 20 h to give polymer with weight-average mol. weight 5.49 + 105.

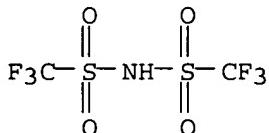
IT 90076-65-6

RL: RCT (Reactant); RACT (Reactant or reagent)

(catalyst precursor; metal complex catalysts for manufacture of high-mol.-weight α-olefin polymers in air or water)

RN 90076-65-6 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME)



● Li

IT 191101-39-0 191101-52-7 191101-55-0

191101-57-2

RL: CAT (Catalyst use); USES (Uses)

(metal complex catalysts for manufacture of high-mol.-weight α-olefin polymers in air or water)

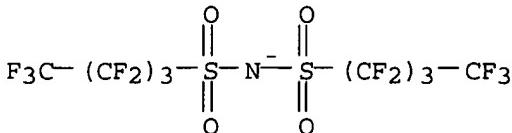
RN 191101-39-0 CAPLUS

CN Palladium(1+), [N,N'-(1,2-dimethyl-1,2-ethanediylidene)bis[2,6-bis(1-methylethyl)benzenamine-κN]]methyl[1,1'-oxybis[ethane]]-, (SP-4-2)-, salt with 1,1,2,2,3,3,4,4,4-nonafluoro-N-[(nonafluorobutyl)sulfonyl]-1-butanesulfonamide (1:1) (9CI) (CA INDEX NAME)

CM 1

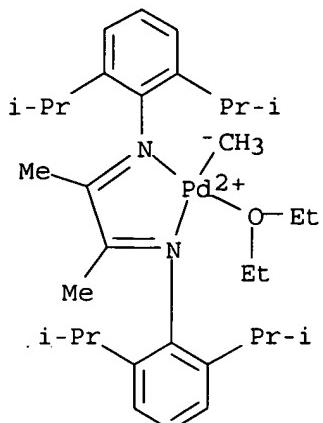
CRN 191101-38-9

CMF C8 F18 N O4 S2



CM 2

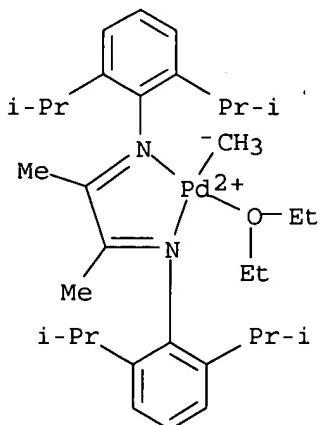
CRN 163893-66-1
CMF C33 H53 N2 O Pd
CCI CCS



RN 191101-52-7 CAPLUS
CN Palladium(1+), [N,N'-(1,2-dimethyl-1,2-ethanediylidene)bis[2,6-bis(1-methylethyl)benzenamine- κ N]]methyl[1,1'-oxybis[ethane]]-, (SP-4-2)-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

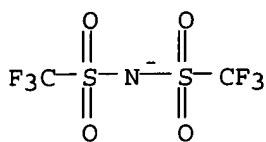
CM 1

CRN 163893-66-1
CMF C33 H53 N2 O Pd
CCI CCS



CM 2

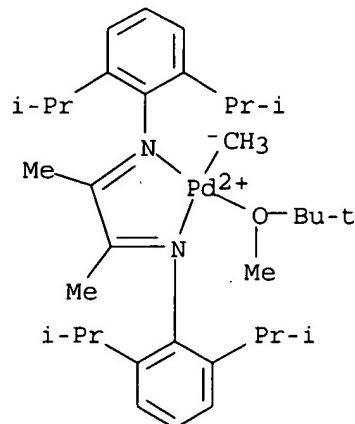
CRN 98837-98-0
CMF C2 F6 N O4 S2



RN 191101-55-0 CAPLUS
 CN Palladium(1+), [N,N'-(1,2-dimethyl-1,2-ethanediylidene)bis[2,6-bis(1-methylethyl)benzenamine-κN]] [2-(methoxy-κO)-2-methylpropane]methyl-, (SP-4-2)-, salt with 1,1,2,2,2-pentafluoro-N-[(pentafluoroethyl)sulfonyl]ethanesulfonamide (1:1) (9CI) (CA INDEX NAME)

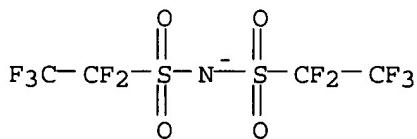
CM 1

CRN 191101-49-2
 CMF C34 H55 N2 O Pd
 CCI CCS



CM 2

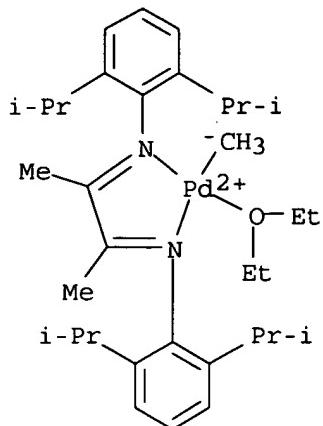
CRN 129318-46-3
 CMF C4 F10 N O4 S2



RN 191101-57-2 CAPLUS
 CN Palladium(1+), [N,N'-(1,2-dimethyl-1,2-ethanediylidene)bis[2,6-bis(1-methylethyl)benzenamine-κN]]methyl[1,1'-oxybis[ethane]]-, (SP-4-2)-, salt with 1,1,2,2,2-pentafluoro-N-[(pentafluoroethyl)sulfonyl]ethanesulfonamide (1:1) (9CI) (CA INDEX NAME)

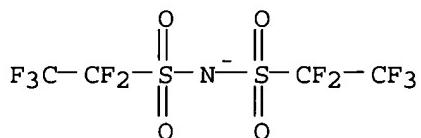
CM 1

CRN 163893-66-1
 CMF C33 H53 N2 O Pd
 CCI CCS



CM 2

CRN 129318-46-3
 CMF C4 F10 N O4 S2



IT 191101-59-4P

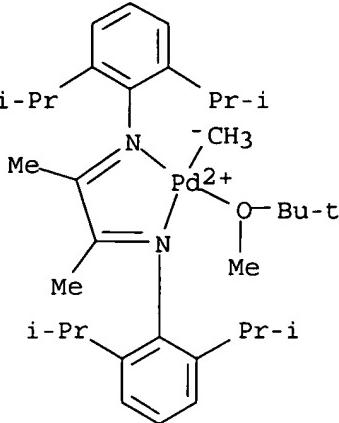
RL: CAT (Catalyst use); IMF (Industrial manufacture); PREP (Preparation);
 USES (Uses)
 (metal complex catalysts for manufacture of high-mol.-weight α -olefin polymers in air or water)

RN 191101-59-4 CAPLUS

CN Palladium(1+), [N,N'-(1,2-dimethyl-1,2-ethanediylidene)bis[2,6-bis(1-methylethyl)benzenamine- κ N]] [2-(methoxy- κ O)-2-methylpropan]methyl-, (SP-4-2)-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

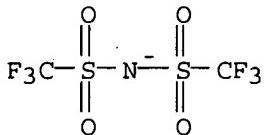
CM 1

CRN 191101-49-2
 CMF C34 H55 N2 O Pd
 CCI CCS



CM 2

CRN 98837-98-0
CMF C2 F6 N O4 S2

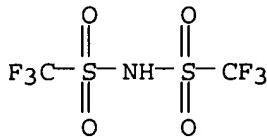


L14 ANSWER 155 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1996:607600 CAPLUS
 DN 125:234309
 TI **Silver** halide photographic material having antistatic properties
 IN Ballerini, Dario; Törterolo, Renzo; Bucci, Marco; Lamanna, William M.;
 Moore, George; Huffman, William A.
 PA Minnesota Mining and Manufacturing Co., USA
 SO Eur. Pat. Appl., 20 pp.
 CODEN: EPXXDW
 DT Patent
 LA English
 FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|-------------------|------|----------|-----------------|------------|
| PI | EP 690338 | A1 | 19960103 | EP 1995-109067 | 19950613 |
| | R: DE, FR, GB, IT | | | EP 1994-110158 | A 19940630 |
| | US 5541049 | A | 19960730 | US 1995-489751 | 19950613 |
| | | | | EP 1994-110158 | A 19940630 |
| | JP 08015823 | A2 | 19960119 | JP 1995-160658 | 19950627 |
| | | | | EP 1994-110158 | A 19940630 |

OS MARPAT 125:234309
 AB The present invention relates to a **silver** halide photog. material comprising a support, at least one **silver** halide emulsion layer coated thereon, and a hydrophilic colloid layer coated on said **silver** halide emulsion layer, wherein said hydrophilic colloid layer comprises a combination of (a) at least one surfactant selected from the group consisting of nonionic perfluoroalkyl(ene)-polyoxyethylene surfactants and polyoxyethylene-modified polysiloxane surfactants and (b) at least one salt of perfluoroalkylsulfonylimide or perfluoroalkylsulfonylmethide.

IT 90076-65-6
 RL: TEM (Technical or engineered material use); USES (Uses)
 (silver halide photog. films with improved antistatic
 properties with hydrophilic colloid layers containing)
 RN 90076-65-6 CAPLUS
 CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-,
 lithium salt (9CI) (CA INDEX NAME)

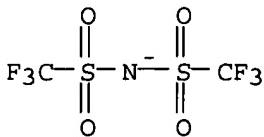


● Li

L14 ANSWER 156 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1996:464139 CAPLUS
 DN 125:221050
 TI Synthesis, structure, Raman, and ESR characterization of a new organic
 charge transfer salt, (BEDT-TTF)₂[N(SO₂CF₃)₂]
 AU Wang, H. Hau; Geiser, Urs; Kelly, Margaret E.; Vanzile, Michael L.;
 Skulan, Andrew J.; Williams, Jack M.; Schleuter, John A.; Kini, Aravinda
 M.; Sirchio, Scott A.; Montgomery, Lawrence K.
 CS Chemistry and Materials Science Divisions, Argonne National Laboratory,
 Argonne, IL, 60439, USA
 SO Molecular Crystals and Liquid Crystals Science and Technology, Section A:
 Molecular Crystals and Liquid Crystals (1996), 284(Advances in the
 Chemistry and Properties of Novel Low-Dimensional and Conducting or
 Superconducting Solids), 427-436
 CODEN: MCLCE9; ISSN: 1058-725X
 PB Gordon & Breach
 DT Journal
 LA English
 AB The title salt was synthesized and subjected to x-ray anal. The anion,
 N(SO₂CF₃)₂⁻, was found to be disordered, which may relate to the absence
 of the v₄ and v₅ Ag modes of the BEDT-TTF mol. in the
 Raman spectrum. ESR measurements reveal its semiconductive behavior with
 a small energy gap of 18.7 meV.
 IT 181593-94-2P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 181593-94-2 CAPLUS
 CN Phosphorus(1+), triphenyl(P,P,P-triphenylphosphine imidato-N)-, (T-4)-,
 salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide
 (1:1) (9CI) (CA INDEX NAME)

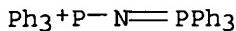
CM 1

CRN 98837-98-0
 CMF C2 F6 N O4 S2



CM 2

CRN 48236-06-2
CMF C36 H30 N P2



IT 181593-93-1P

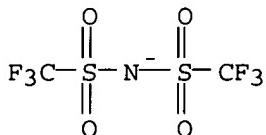
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (preparation, crystal structure, and Raman and ESR spectra of)

RN 181593-93-1 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, ion(1-), compd. with 2-(5,6-dihydro-1,3-dithiolo[4,5-b][1,4]dithiin-2-ylidene)-5,6-dihydro-1,3-dithiolo[4,5-b][1,4]dithiin (1:2) (9CI) (CA INDEX NAME)

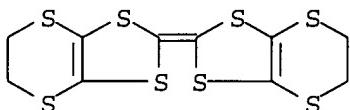
CM 1

CRN 98837-98-0
CMF C2 F6 N O4 S2



CM 2

CRN 66946-48-3
CMF C10 H8 S8



L14 ANSWER 157 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1994:509028 CAPLUS

DN 121:109028

TI Electrophilic Addition and Substitution Reactions of Bis((trifluoromethyl)sulfonyl)amide and Its N-Chloro Derivative

AU Vij, Ashwani; Zheng, Yuan Y.; Kirchmeier, Robert L.; Shreeve, Jean'ne M.

CS Department of Chemistry, University of Idaho, Moscow, ID, 83843, USA

SO Inorganic Chemistry (1994), 33(15), 3281-8

CODEN: INOCAJ; ISSN: 0020-1669

DT Journal

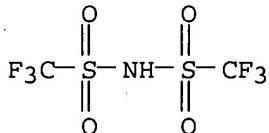
LA English

OS CASREACT 121:109028

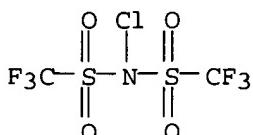
AB Lithium bis((trifluoromethyl)sulfonyl)amide (1) reacts with $\text{S}_2\text{O}_6\text{F}_2$ to form $\text{FSO}_2\text{ON}(\text{SO}_2\text{CF}_3)_2$ (2). Reaction of 2 with KF results in the cleavage of the S-N bond with the concomitant formation of $\text{CF}_3\text{SO}_2\text{F}$. The ease of electrophilic addition reactions of $\text{HN}(\text{SO}_2\text{CF}_3)_2$ (3) with $\text{CH}_2:\text{CHF}$, $\text{CH}_2:\text{CF}_2$, and $\text{CHF}:\text{CF}_2$ depends upon the hydrogen content of the olefin. Addition occurs

in a unidirectional fashion according to Markovnikov's rule to form CH₃CHF(N(SO₂CF₃)₂) (4), CH₃CF₂N(SO₂CF₃)₂ (5), and CH₂FCF₂N(SO₂CF₃)₂ (6), resp. Cleavage of the CF₂-N bond in 5 by reaction with CsF leads to the formation of CH₃CF₃ in about 12% yield. The major product formed is CF₃SO₂F. The reactivity of fluorine atoms of the difluoromethylene group of 5 is shown by its reaction with Me₃SiNMe₂ in the presence of CsF under mild conditions where CF₃SO₂F, (CH₃)₃SiF, and CH₃C[N(CH₃)₂]:NSO₂CF₃ (7) are formed. AgN(SO₂CF₃)₂ is formed by the reaction of Ag₂CO₃ with an aqueous solution of 3 and undergoes metathetical reactions readily with compds. containing active halogen atoms to introduce the N(SO₂CF₃)₂ group. Strong Lewis acids such as ZN(SO₂CF₃)₂ [Z = R₃Sn, R = Me (8), Bu (9), and Ph (10); Z = Me₃Si (11)] can thus be conveniently prepared. The vinyltin(IV) compound Me₃SnCF:CF₂ (12) is synthesized by the reaction between Me₃SnCl and CF₂:CFBr in hexaethylphosphorus triamide and benzonitrile. Multinuclear NMR studies of the trialkylstannyl/silyl derivs. suggest a quasi-tetrahedral structure around the central silicon or tin atom as reflected by their very low ²⁹Si (55.9 ppm) and ¹¹⁹Sn (~250 ppm) NMR chemical shifts and ¹J(119Sn-¹³C) and ²J(119Sn-¹H) coupling consts. Compds. 8, 9, and 11 can also be isolated by reaction of ClN(SO₂CF₃)₂ (13) with the resp. alkylmetal chlorides in a noncoordinating solvent. However, 13 fails to add across the perfluorovinyl group in CF₂:CFSnMe₃ and forms CF₂:CFCl and 8 instead. Reactions of 13 with a variety of per/polyfluoroolefins, such as CF₂:CFX [X = H, F, [cyclic] -CF₂CF₂CF₂CF₂N- and -CF₂CF₂OCF₂CF₂N-], CH₂:CXY [X = H; Y = F, CF₃; X = Y = F] result in uni- or bidirectional addition to give their resp. products. Insertion of ClCN into the N-Cl bond of 13 forms an azaalkene, CCl₂:NN(SO₂CF₃)₂. Reaction of CFC₁₂S(O)Cl with 13 forms CFC₁₂S(O)N(SO₂CF₃)₂ with concomitant evolution of chlorine.

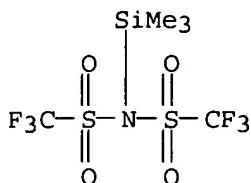
- IT 82113-65-3P, Bis(trifluoromethylsulfonyl)amine 91742-17-5P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and electrophilic addition and substitution reactions of)
 RN 82113-65-3 CAPLUS
 CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]- (9CI)
 (CA INDEX NAME)



- RN 91742-17-5 CAPLUS
 CN Methanesulfonamide, N-chloro-1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]- (9CI) (CA INDEX NAME)

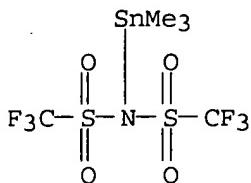


- IT 82113-66-4P 156903-86-5P 156903-87-6P
 156903-88-7P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation and ionic nature of bonding in)
 RN 82113-66-4 CAPLUS
 CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-N-(trimethylsilyl)- (9CI) (CA INDEX NAME)



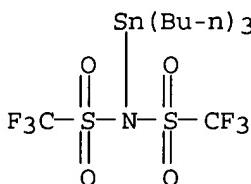
RN 156903-86-5 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-N-(trimethylstannyl)- (9CI) (CA INDEX NAME)



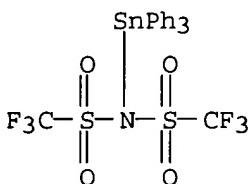
RN 156903-87-6 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-(tributylstannyl)-N-[(trifluoromethyl)sulfonyl]- (9CI) (CA INDEX NAME)



RN 156903-88-7 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-N-(triphenylstannyl)- (9CI) (CA INDEX NAME)

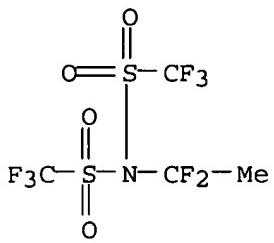


IT 156903-83-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(preparation and reactions of)

RN 156903-83-2 CAPLUS

CN Methanesulfonamide, N-(1,1-difluoroethyl)-1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]- (9CI) (CA INDEX NAME)

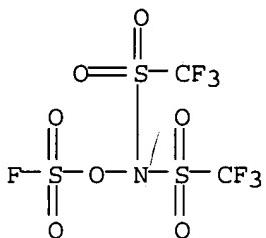


IT 156903-81-0P 156903-82-1P 156903-84-3P
 156903-89-8P 156903-90-1P 156903-91-2P
 156903-92-3P 156903-93-4P 156903-94-5P
 156903-95-6P 156903-96-7P 156903-97-8P
 156903-98-9P 156903-99-0P 156904-00-6P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)

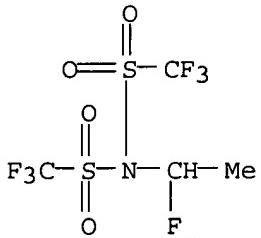
RN 156903-81-0 CAPLUS

CN Hydroxylamine-O-sulfonyl fluoride, N,N-bis[(trifluoromethyl)sulfonyl]-
 (9CI) (CA INDEX NAME)



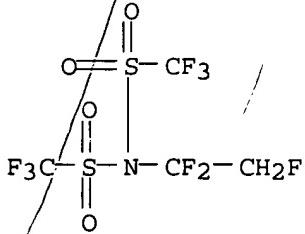
RN 156903-82-1 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-(1-fluoroethyl)-N-
 [(trifluoromethyl)sulfonyl]- (9CI). (CA INDEX NAME)



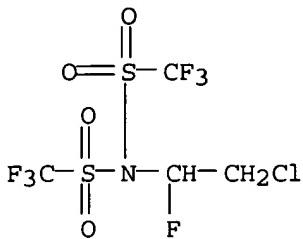
RN 156903-84-3 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-(1,1,2-trifluoroethyl)-N-
 [(trifluoromethyl)sulfonyl]- (9CI) (CA INDEX NAME)



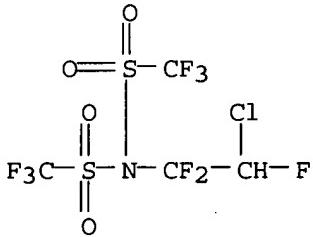
RN 156903-89-8 CAPLUS

CN Methanesulfonamide, N-(2-chloro-1-fluoroethyl)-1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]- (9CI) (CA INDEX NAME)



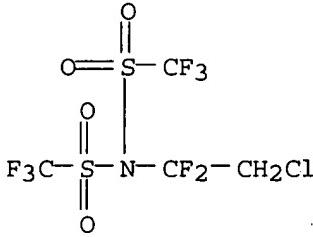
RN 156903-90-1 CAPLUS

CN Methanesulfonamide, N-(2-chloro-1,1,2-trifluoroethyl)-1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]- (9CI) (CA INDEX NAME)



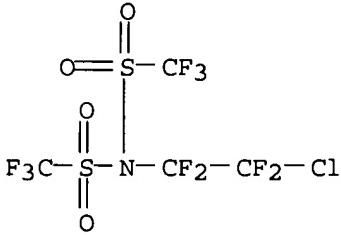
RN 156903-91-2 CAPLUS

CN Methanesulfonamide, N-(2-chloro-1,1-difluoroethyl)-1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]- (9CI) (CA INDEX NAME)



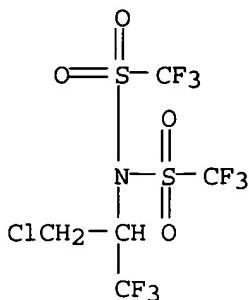
RN 156903-92-3 CAPLUS

CN Methanesulfonamide, N-(2-chloro-1,1,2,2-tetrafluoroethyl)-1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]- (9CI) (CA INDEX NAME)



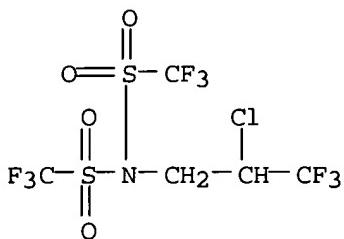
RN 156903-93-4 CAPLUS

CN Methanesulfonamide, N-[1-(chloromethyl)-2,2,2-trifluoroethyl]-1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]- (9CI) (CA INDEX NAME)



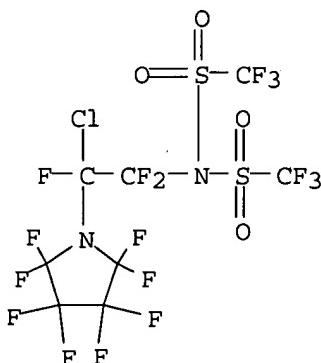
RN 156903-94-5 CAPLUS

CN Methanesulfonamide, N-(2-chloro-3,3-trifluoropropyl)-1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]- (9CI) (CA INDEX NAME)



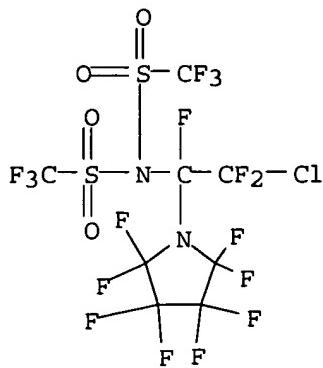
RN 156903-95-6 CAPLUS

CN Methanesulfonamide, N-[2-chloro-1,1,2-trifluoro-2-(2,2,3,3,4,4,5,5-octafluoro-1-pyrrolidinyl)ethyl]-1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]- (9CI) (CA INDEX NAME)



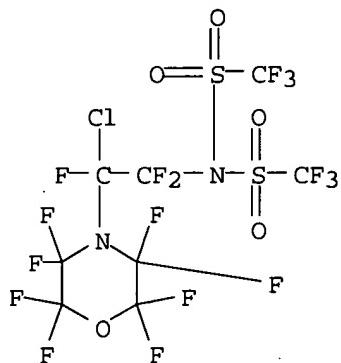
RN 156903-96-7 CAPLUS

CN Methanesulfonamide, N-[2-chloro-1,2,2-trifluoro-1-(2,2,3,3,4,4,5,5-octafluoro-1-pyrrolidinyl)ethyl]-1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]- (9CI) (CA INDEX NAME)



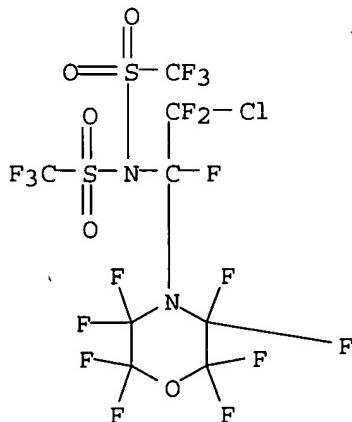
RN 156903-97-8 CAPLUS

CN Methanesulfonamide, N-[2-chloro-1,1,2-trifluoro-2-(2,2,3,3,5,5,6,6-octafluoro-4-morpholinyl)ethyl]-1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]- (9CI) (CA INDEX NAME)



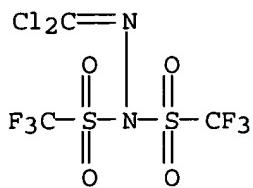
RN 156903-98-9 CAPLUS

CN Methanesulfonamide, N-[2-chloro-1,2,2-trifluoro-1-(2,2,3,3,5,5,6,6-octafluoro-4-morpholinyl)ethyl]-1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]- (9CI) (CA INDEX NAME)

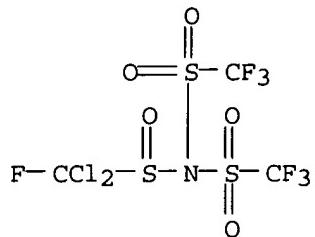


RN 156903-99-0 CAPLUS

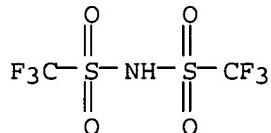
CN Methanesulfonic acid, trifluoro-, (dichloromethylene)[(trifluoromethyl)sulfonyl]hydrazide (9CI) (CA INDEX NAME)



RN 156904-00-6 CAPLUS
 CN Methanesulfonamide, N-[(dichlorofluoromethyl)sulfinyl]-1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]- (9CI) (CA INDEX NAME)



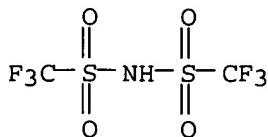
IT 90076-65-6, Lithium bis(trifluoromethylsulfonyl)amide
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (protonation or conversion to fluorosulfate)
 RN 90076-65-6 CAPLUS
 CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME)



● Li

L14 ANSWER 158 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1992:541211 CAPLUS
 DN 117:141211
 TI Synthesis and electrochemical characterization of new polymer electrolytes based on dioxolane homo and co-polymers
 AU Goulart, G.; Sanchez, J. Y.; Armand, M.
 CS Lab. Ionique Electrochim. Solide Grenoble, ENSEEG, St. Martin d'Heres, 38402, Fr.
 SO Electrochimica Acta (1992), 37(9), 1589-92
 CODEN: ELCAAV; ISSN: 0013-4686
 DT Journal
 LA English
 AB Several polyacetals were investigated as host polymers for polymer electrolytes. The cationic polymerization and copolymer. of dioxolane (DXL) and 4-Me dioxolane (MDXL) are reported. If PDXL is a semicryst. polymer, an amorphous polymer electrolyte at room temperature is obtained for some LiTFSI concns. The PMDXL as well as the copolymer Poly(DXL-MDXL) appear completely amorphous. Nevertheless, owing to salt desolvation or polymer degradation, the PMDXL/LiTFSI conductivities drop when the temperature increases.

IT 90076-65-6
 RL: PRP (Properties)
 (elec. conductivity of polymer electrolyte containing polydioxolane or
 polymethyldioxolane copolymer of dioxolane-methyldioxolane with)
 RN 90076-65-6 CAPLUS
 CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-,
 lithium salt (9CI) (CA INDEX NAME)



● Li

L14 ANSWER 159 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1991:570575 CAPLUS
 DN 115:170575
 TI Electrochromic element, materials for use in such element, processes for
 making such element, and such materials
 IN Couput, Jean Paul; Campet, Guy; Chabacno, Jean Michel; Muller, Daniel;
 Bourrel, Maurice; Dirkx, Ryan R.; Ferry, Didier; Garie, Regine; Delmas,
 Claude; et al.
 PA Atochem North America, Inc., USA; Societe Nationale Elf Aquitaine (SNEA)
 SO PCT Int. Appl., 57 pp.
 CODEN: PIXXD2

DT Patent
 LA English

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---|------|----------|-----------------|-------------|
| PI | WO 9101510 | A1 | 19910207 | WO 1990-US3873 | 19900713 |
| | W: CA, JP, US | | | US 1989-379225 | A2 19890713 |
| | RW: AT, BE, CH, DE, DK, ES, FR, GB, IT, LU, NL, SE | | | US 1989-379225 | 19890713 |
| | US 5086351 | A | 19920204 | US 1989-379225 | 19890713 |
| | CA 2063608 | AA | 19910114 | CA 1990-2063608 | 19900713 |
| | | | | US 1989-379225 | A 19890713 |
| | JP 04507006 | T2 | 19921203 | JP 1990-510461 | 19900713 |
| | JP 3009725 | B2 | 20000214 | | |
| | | | | US 1989-379225 | A 19890713 |
| | | | | WO 1990-US3873 | W 19900713 |
| | EP 519921 | A1 | 19921230 | EP 1990-911047 | 19900713 |
| | EP 519921 | B1 | 19960821 | | |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, LU, NL, SE | | | US 1989-379225 | A 19890713 |
| | | | | WO 1990-US3873 | W 19900713 |
| | EP 721139 | A1 | 19960710 | EP 1996-100846 | 19900713 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, LU, NL, SE | | | US 1989-379225 | A 19890713 |
| | | | | EP 1990-911047 | A3 19900713 |
| | AT 141696 | E | 19960915 | AT 1990-911047 | 19900713 |
| | | | | US 1989-379225 | A 19890713 |
| | US 5276547 | A | 19940104 | US 1991-814797 | 19911231 |
| | | | | US 1989-379225 | A3 19890713 |
| | US 5274493 | A | 19931228 | US 1992-809497 | 19920312 |
| | | | | US 1989-379225 | A2 19890713 |

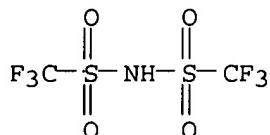
AB An electrochromic element is described, useful in an electrochromic glass or mirror device, along with a process for making such an element. The element is a 5-layered structure including an electrolyte ion-conducting layer interposed between 1st and 2nd inorg. electrochromic layers which are interposed between a pair of conductive electrodes. The second inorg. electrochromic layer is amorphous. The 1st and 2nd inorg. electrochromic layers are different and are capable of exhibiting color-forming properties complementary to one another upon the incorporation of ≥ 1 H, Li, Na, K, Ag, Cu or Tl ion. The electrolyte ion-conducting layer may be a copolymer of ethylene oxide, butylene oxide or Me glycidyl ether, and optionally a small amount of allyl glycidyl ether, along with an ionizable salt, or may be a polyurethane gel formed by reacting the copolymer with triisocyanate, along with an ionizable salt. The 2nd inorg. electrochromic layer comprises a transition element chalcogenide or halide. The electrochromic element may also comprise a plurality of 5-layer structures in tandem, each pair separated by a substrate.

IT 82113-65-3

RL: PRP (Properties)
(in electrochromic units)

RN 82113-65-3 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]- (9CI)
(CA INDEX NAME)



L14 ANSWER 160 OF 160 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1990:477646 CAPLUS

DN 113:77646

TI Chemistry of perfluoromethylsulfonyl perfluorobutylsulfonyl imide

AU Singh, Sukhjinder; DesMarteau, Darryl D.

CS Howard L. Hunter Chem. Lab., Clemson Univ., Clemson, SC, 29634-1905, USA

SO Inorganic Chemistry (1990), 29(16), 2982-5

CODEN: INOCAJ; ISSN: 0020-1669

DT Journal

LA English

OS CASREACT 113:77646

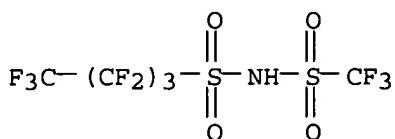
AB Selected chemical of the unsym. imide $\text{CF}_3\text{SO}_2\text{N}(\text{H})\text{SO}_2\text{C}_4\text{F}_9$ is described. The **silver** derivative is a useful reagent for synthesis of both organic and inorg. derivs. Reaction with Me or Et iodide resulted in high yields of the N-alkyl imides. Chlorine reacts with the **silver** derivative to give the N-chloroimide in excellent yield. Reaction of $\text{CF}_3\text{SO}_2\text{NClSO}_2\text{C}_4\text{F}_9$ with NO and NO_2 formed the corresponding nitroso and nitro derivs., and CO and ethylene react at 22° to give addition compds. UV photolysis of the N-chloroimide resulted in the quant. formation of $\text{C}_4\text{F}_9\text{Cl}$ and the cyclic dimer of the resultant $\text{CF}_3\text{SO}_2\text{NSO}_2$.

IT 39847-37-5

RL: MSC (Miscellaneous)
(chemical of)

RN 39847-37-5 CAPLUS

CN 1-Butanesulfonamide, 1,1,2,2,3,3,4,4,4-nonafluoro-N-
[(trifluoromethyl)sulfonyl]- (9CI) (CA INDEX NAME)

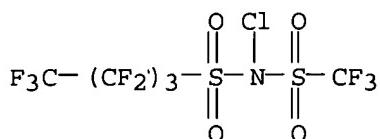


IT 128445-99-8P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and substitution reactions or photodimerization of)

RN 128445-99-8 CAPLUS

CN 1-Butanesulfonamide, N-chloro-1,1,2,2,3,3,4,4-nonafluoro-N-
[(trifluoromethyl)sulfonyl]- (9CI) (CA INDEX NAME)



IT 128445-97-6P 128445-98-7P 128446-00-4P

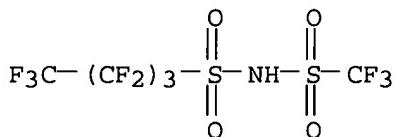
128446-01-5P 128446-02-6P 128446-03-7P

128446-04-8P 128446-05-9P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 128445-97-6 CAPLUS

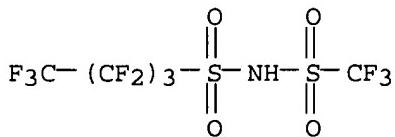
CN 1-Butanesulfonamide, 1,1,2,2,3,3,4,4-nonafluoro-N-
[(trifluoromethyl)sulfonyl]-, potassium salt (9CI) (CA INDEX NAME)



● K

RN 128445-98-7 CAPLUS

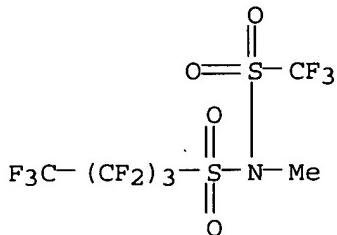
CN 1-Butanesulfonamide, 1,1,2,2,3,3,4,4-nonafluoro-N-
[(trifluoromethyl)sulfonyl]-, cesium salt (9CI) (CA INDEX NAME)



● Cs

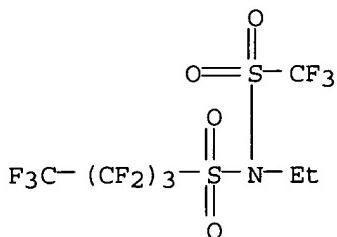
RN 128446-00-4 CAPLUS

CN 1-Butanesulfonamide, 1,1,2,2,3,3,4,4-nonafluoro-N-methyl-N-
[(trifluoromethyl)sulfonyl]- (9CI) (CA INDEX NAME)



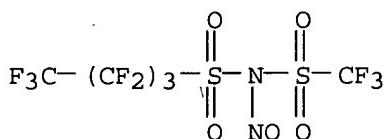
RN 128446-01-5 CAPLUS

CN 1-Butanesulfonamide, N-ethyl-1,1,2,2,3,3,4,4,4-nonafluoro-N-[(trifluoromethyl)sulfonyl]- (9CI) (CA INDEX NAME)



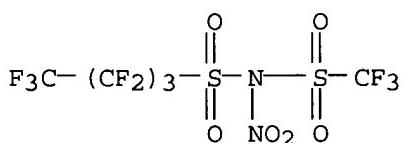
RN 128446-02-6 CAPLUS

CN 1-Butanesulfonamide, 1,1,2,2,3,3,4,4,4-nonafluoro-N-nitroso-N-[(trifluoromethyl)sulfonyl]- (9CI) (CA INDEX NAME)



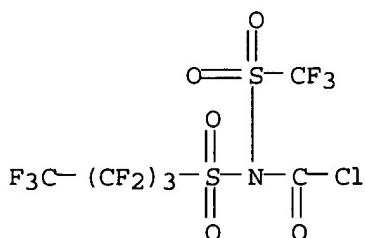
RN 128446-03-7 CAPLUS

CN 1-Butanesulfonamide, 1,1,2,2,3,3,4,4,4-nonafluoro-N-nitro-N-[(trifluoromethyl)sulfonyl]- (9CI) (CA INDEX NAME)

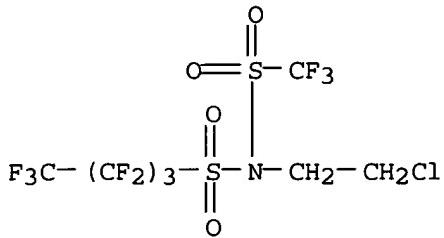


RN 128446-04-8 CAPLUS

CN Carbamic chloride, [(nonafluorobutyl)sulfonyl][(trifluoromethyl)sulfonyl]- (9CI) (CA INDEX NAME)



RN 128446-05-9 CAPLUS
CN 1-Butanesulfonamide, N-(2-chloroethyl)-1,1,2,2,3,3,4,4,4-nonafluoro-N-[trifluoromethyl]sulfonyl] - (9CI) (CA INDEX NAME)



=>
=> d his

(FILE 'HOME' ENTERED AT 20:11:58 ON 29 OCT 2005)

FILE 'REGISTRY' ENTERED AT 20:13:34 ON 29 OCT 2005

L1 STRUCTURE UPLOADED
L2 0 S L1
L3 0 SEARCH L1 FULL
L4 STRUCTURE UPLOADED
L5 0 S L1
L6 2733 SEARCH L`1
L7 0 SEARCH L1 FULL
L8 STRUCTURE UPLOADED
L9 50 S L8
L10 1772 SEARCH L8 FULL

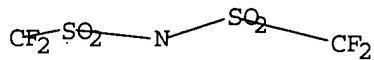
FILE 'CAPLUS' ENTERED AT 20:15:28 ON 29 OCT 2005

L11 305388 S SLIVER OR AG
L12 430757 S SILVER OR AG
L13 3838 S L10
L14 160 S L13 AND L12

=>
Uploading C:\Program Files\Stnexp\Queries\141d.str

L15 STRUCTURE UPLOADED

=> d 115
L15 HAS NO ANSWERS
L15 STR



N—G1—N

G1 Ag,Au,Ba,Bi,Ca,Cd,Fe,Hg,K,Na,Ni,Zn

Structure attributes must be viewed using STN Express query preparation.

=> s 115

REGISTRY INITIATED

Substance data SEARCH and crossover from CAS REGISTRY in progress...
Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

SAMPLE SEARCH INITIATED 20:36:55 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 9 TO ITERATE

100.0% PROCESSED 9 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 9 TO 360
PROJECTED ANSWERS: 0 TO 0

L16 0 SEA SSS SAM L15

L17 0 L16

=> search 115

REGISTRY INITIATED

Substance data SEARCH and crossover from CAS REGISTRY in progress...
Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

SAMPLE SEARCH INITIATED 20:37:00 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 9 TO ITERATE

100.0% PROCESSED 9 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 9 TO 360
PROJECTED ANSWERS: 0 TO 0

L18 0 SEA SSS SAM L15

L19 0 L18

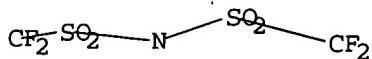
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L20 STRUCTURE uploaded

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Uploading C:\Program Files\Stnexp\Queries\141e.str

L21 STRUCTURE UPLOADED

=> d 120
L20 HAS NO ANSWERS
L20 STR



Structure attributes must be viewed using STN Express query preparation.

=> d 121
L21 HAS NO ANSWERS
L21 STR

N—G1—N

G1 Ag,Au,Ba,Bi,Ca,Cd,Fe,Hg,K,Na,Ni,Zn

Structure attributes must be viewed using STN Express query preparation.

=> s 120
REGISTRY INITIATED
Substance data SEARCH and crossover from CAS REGISTRY in progress...
Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

SAMPLE SEARCH INITIATED 20:39:03 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 108 TO ITERATE

100.0% PROCESSED 108 ITERATIONS 50 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 1537 TO 2783
PROJECTED ANSWERS: 997 TO 2043

L22 50 SEA SSS SAM L20

L23 47 L22

=> search 120
REGISTRY INITIATED
Substance data SEARCH and crossover from CAS REGISTRY in progress...
Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

SAMPLE SEARCH INITIATED 20:39:11 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 108 TO ITERATE

100.0% PROCESSED 108 ITERATIONS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 1537 TO 2783
PROJECTED ANSWERS: 997 TO 2043

L24 50 SEA SSS SAM L20

L25 47 L24

| | SINCE FILE ENTRY | TOTAL SESSION |
|--|------------------|---------------|
| COST IN U.S. DOLLARS | | |
| FULL ESTIMATED COST | 0.45 | 1469.60 |
| DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) | SINCE FILE ENTRY | TOTAL SESSION |
| CA SUBSCRIBER PRICE | 0.00 | -116.80 |

FILE 'REGISTRY' ENTERED AT 20:39:18 ON 29 OCT 2005
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 27 OCT 2005 HIGHEST RN 866318-76-5
DICTIONARY FILE UPDATES: 27 OCT 2005 HIGHEST RN 866318-76-5

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

*
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added, *
* effective March 20, 2005. A new display format, IDERL, is now *
* available and contains the CA role and document type information. *
*

Structure search iteration limits have been increased. See HELP SLIMITS for details.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/ONLINE/UG/regprops.html>

=> d his

(FILE 'HOME' ENTERED AT 20:11:58 ON 29 OCT 2005)

FILE 'REGISTRY' ENTERED AT 20:13:34 ON 29 OCT 2005

L1 STRUCTURE UPLOADED
L2 0 S L1
L3 0 SEARCH L1 FULL
L4 STRUCTURE UPLOADED
L5 0 S L1
L6 2733 SEARCH L`1
L7 0 SEARCH L1 FULL
L8 STRUCTURE UPLOADED
L9 50 S L8
L10 1772 SEARCH L8 FULL

FILE 'CAPLUS' ENTERED AT 20:15:28 ON 29 OCT 2005

L11 305388 S SLIVER OR AG
L12 430757 S SILVER OR AG
L13 3838 S L10
L14 160 S L13 AND L12
L15 STRUCTURE UPLOADED
S L15

FILE 'REGISTRY' ENTERED AT 20:36:55 ON 29 OCT 2005

L16 0 S L15

FILE 'CAPLUS' ENTERED AT 20:36:56 ON 29 OCT 2005

L17 0 S L16
S L15

FILE 'REGISTRY' ENTERED AT 20:37:00 ON 29 OCT 2005

L18 0 S L15

FILE 'CAPLUS' ENTERED AT 20:37:00 ON 29 OCT 2005

L19 0 S L18
L20 STRUCTURE UPLOADED
L21 STRUCTURE UPLOADED
S L20

FILE 'REGISTRY' ENTERED AT 20:39:02 ON 29 OCT 2005

L22 50 S L20

FILE 'CAPLUS' ENTERED AT 20:39:03 ON 29 OCT 2005

L23 47 S L22
S L20

FILE 'REGISTRY' ENTERED AT 20:39:11 ON 29 OCT 2005

L24 50 S L20

FILE 'CAPLUS' ENTERED AT 20:39:11 ON 29 OCT 2005

L25 47 S L24

FILE 'REGISTRY' ENTERED AT 20:39:18 ON 29 OCT 2005

=> d 120

L20 HAS NO ANSWERS
L20 STR



Structure attributes must be viewed using STN Express query preparation.

```
=> d 121  
L21 HAS NO ANSWERS  
L21 STR
```

N—G1—N

G1 Ag,Au,Ba,Bi,Ca,Cd,Fe,Hg,K,Na,Ni,Zn

Structure attributes must be viewed using STN Express query preparation.

```
=> s 120 full  
FULL SEARCH INITIATED 20:39:48 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 2565 TO ITERATE
```

100.0% PROCESSED 2565 ITERATIONS 1772 ANSWERS
SEARCH TIME: 00.00.01

L26 1772 SEA SSS FUL L20

```
=> s 121\  
L27 1195 L21\  
('L21')
```

```
=> s 121  
SAMPLE SEARCH INITIATED 20:40:01 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 24682 TO ITERATE
```

8.1% PROCESSED 2000 ITERATIONS 47 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 484242 TO 503038
PROJECTED ANSWERS: 10156 TO 13044

L28 47 SEA SSS SAM L21

```
=> search 121  
ENTER TYPE OF SEARCH (SSS), CSS, FAMILY, OR EXACT:.  
ENTER SCOPE OF SEARCH (SAMPLE), FULL, RANGE, OR SUBSET:full  
FULL SEARCH INITIATED 20:40:07 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 493622 TO ITERATE
```

100.0% PROCESSED 493622 ITERATIONS 11176 ANSWERS
SEARCH TIME: 00.00.02

L29 11176 SEA SSS FUL L21

```
=> file caplus  
COST IN U.S. DOLLARS SINCE FILE TOTAL  
ENTRY SESSION  
FULL ESTIMATED COST 327.26 1796.86  
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL  
ENTRY SESSION  
CA SUBSCRIBER PRICE 0.00 -116.80
```

FILE 'CAPLUS' ENTERED AT 20:40:32 ON 29 OCT 2005
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FILE COVERS 1907 - 29 Oct 2005 VOL 143 ISS 19
FILE LAST UPDATED: 28 Oct 2005 (20051028/ED)

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<http://www.cas.org/infopolicy.html>

=> s 126
L30 3838 L26

=> s 129
L31 6781 L29

=> s 130 and 131
L32 10 L30 AND L31

=> d 132 fbib ab hitstr 1-10

L32 ANSWER 1 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2005:638669 CAPLUS

DN 143:145190

TI Synthesis of ionic liquids

IN Dai, Sheng; Luo, Huimin

PA Ut-Battelle, Llc., USA

SO PCT Int. Appl., 21 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---|------|----------|-----------------|----------|
| PI | WO 2005065398 | A2 | 20050721 | WO 2004-US44011 | 20041229 |
| | W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| | RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |

US 2003-749450 A 20031231

AB Ionic compds. which are liqs. at room temperature are formed by the method of mixing a neutral organic ligand with the salt of a metal cation and its

conjugate anion. Thus, mixing neat cyclohexyl-15-crown-5 (L) with N-lithiobis(trifluoromethane)sulfonimide ($\text{LiN}(\text{Tf})_2$) and warming afforded the ionic liquid $\text{Li}^+(\text{L}) \text{N}-(\text{Tf})_2$. Also, reaction of alkylamines (R_1NH_2 and R_2NH_2 where R_1 and R_2 = same or different alkyl) with AgNO_3 in water at room temperature, followed by addition of $\text{LiN}(\text{Tf})_2$ afforded ionic liqs. $[\text{Ag}(\text{NH}_2\text{R}_1)(\text{NH}_2\text{R}_2)] [\text{N}(\text{Tf})_2]$. The liqs. are hydrophobic, conductive and stable, and may be used as solvent, for solvent extraction, gas-liquid separation,

used in electrochem. devices, and used as a heat transfer fluid.

IT 90076-65-6, Lithium bis(trifluoromethane)sulfonimide

98837-98-0D, salt

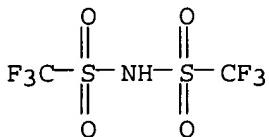
RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of room temperature hydrophobic ionic liqs. from mixing neutral organic

ligand with salt of metal cation and its conjugate anion)

RN 90076-65-6 CAPLUS

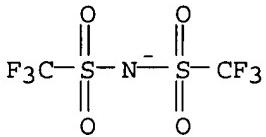
CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME)



● Li

RN 98837-98-0 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, ion(1-) (9CI) (CA INDEX NAME)



IT 858101-34-5P 858101-35-6P 858101-36-7P

858101-37-8P 858101-39-0P 858101-41-4P

858101-43-6P 858101-45-8P 858101-47-0P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of room temperature hydrophobic ionic liqs. from mixing neutral organic

ligand with salt of metal cation and its conjugate anion)

RN 858101-34-5 CAPLUS

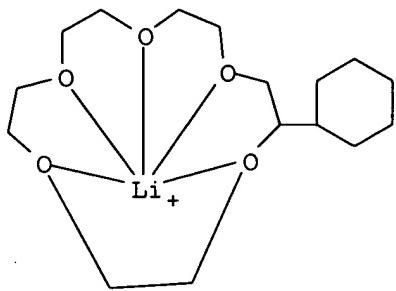
CN INDEX NAME NOT YET ASSIGNED

CM 1

CRN 858101-33-4

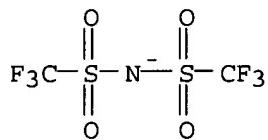
CMF C16 H30 Li O5

CCI CCS



CM 2

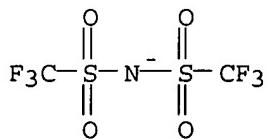
CRN 98837-98-0
CMF C2 F6 N O4 S2



RN 858101-35-6 CAPLUS
CN Silver(1+), bis(1-propanamine)-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 98837-98-0
CMF C2 F6 N O4 S2



CM 2

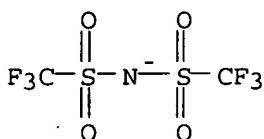
CRN 15907-07-0
CMF C6 H18 Ag N2
CCI CCS



RN 858101-36-7 CAPLUS
CN Silver(1+), bis(ethanamine)-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 98837-98-0
CMF C2 F6 N O4 S2



CM 2

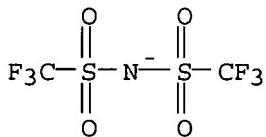
CRN 18080-03-0
 CMF C4 H14 Ag N2
 CCI CCS



RN 858101-37-8 CAPLUS
 CN Silver(1+), bis(methanamine)-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 98837-98-0
 CMF C2 F6 N O4 S2



CM 2

CRN 16972-62-6
 CMF C2 H10 Ag N2
 CCI CCS



RN 858101-39-0 CAPLUS
 CN Silver(1+), (ethanamine)(methanamine)-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

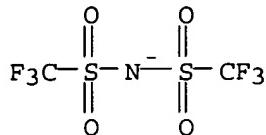
CM 1

CRN 858101-38-9
 CMF C3 H12 Ag N2
 CCI CCS



CM 2

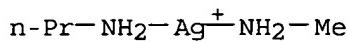
CRN 98837-98-0
CMF C2 F6 N O4 S2



RN 858101-41-4 CAPLUS
CN Silver(1+), (methanamine) (1-propanamine)-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

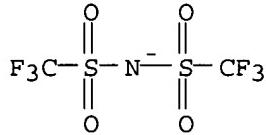
CM 1

CRN 858101-40-3
CMF C4 H14 Ag N2
CCI CCS



CM 2

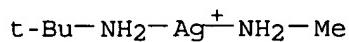
CRN 98837-98-0
CMF C2 F6 N O4 S2



RN 858101-43-6 CAPLUS
CN Silver(1+), (methanamine) (2-methyl-2-propanamine)-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

CM 1

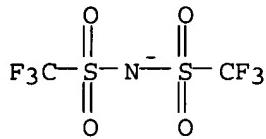
CRN 858101-42-5
CMF C5 H16 Ag N2
CCI CCS



CM 2

CRN 98837-98-0

CMF C2 F6 N O4 S2



RN 858101-45-8 CAPLUS

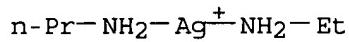
CN Silver(1+), (ethanamine)(1-propanamine)-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 858101-44-7

CMF C5 H16 Ag N2

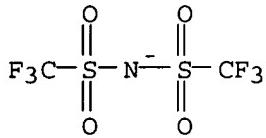
CCI CCS



CM 2

CRN 98837-98-0

CMF C2 F6 N O4 S2



RN 858101-47-0 CAPLUS

CN Silver(1+), (2-methyl-2-propanamine)(1-propanamine)-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 858101-46-9

CMF C7 H20 Ag N2

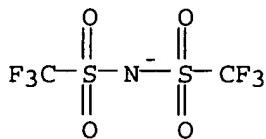
CCI CCS



CM 2

CRN 98837-98-0

CMF C2 F6 N O4 S2

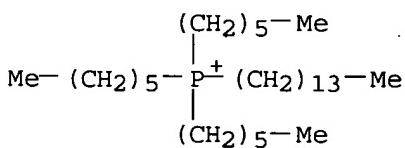


L32 ANSWER 2 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2005:384903 CAPLUS
 DN 143:78251
 TI Tetraalkylphosphonium-based ionic liquids
 AU Del Sesto, Rico E.; Corley, Cynthia; Robertson, Al; Wilkes, John S.
 CS Department of Chemistry, US Air Force Academy, USAF Academy, CO,
 80840-6230, USA
 SO Journal of Organometallic Chemistry (2005), 690(10), 2536-2542
 CODEN: JORCAI; ISSN: 0022-328X
 PB Elsevier B.V.
 DT Journal
 LA English
 AB Ionic liqs. are salts that are liquid at or near room temperature. Their wide liquid range, good thermal stability, and very low vapor pressure make them attractive for numerous applications. The general approach to creating ionic liqs. is to employ a large, unreactive, low symmetry cation with and an anion that largely controls the phys. and chemical properties. The most common cations used in ionic liqs. are N-alkylpyridinium and N,N'-dialkylimidazolium. Another very effective cation for the creation of ionic liqs. is tetraalkylphosphonium, [PR₁R₂R₃R₄]⁺. The alkyl groups, R_n, generally are large and not all the same. The halide salts of several phosphonium cations are available as starting materials for metathesis reactions used to prepare ionic liqs. The large phosphonium cations can combine with relatively large anions to make viscous but free flowing liqs. with formula mass greater than 1000 g mol⁻¹. Some other more massive salts are waxes and glasses. The synthesis and the phys., chemical, and optical properties of phosphonium-ionic liqs. having anions with a wide range of masses were measured and are reported here.

IT 460092-03-9P 547718-93-4P 547718-94-5P
 855788-65-7P 855788-71-5P 855788-72-6P
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
 (preparation and properties of tetraalkylphosphonium-based ionic liqs.)
 RN 460092-03-9 CAPLUS
 CN Phosphonium, trihexyltetradecyl-, salt with 1,1,1-trifluoro-N-[trifluoromethyl]sulfonyl)methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

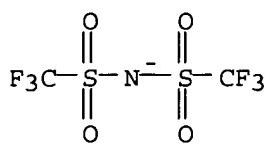
CM 1

CRN 374683-43-9
 CMF C32 H68 P



CM 2

CRN 98837-98-0
 CMF C2 F6 N O4 S2



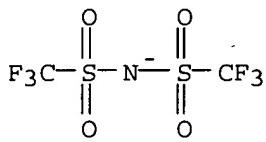
RN 547718-93-4 CAPLUS

CN Phosphonium, tetrabutyl-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 98837-98-0

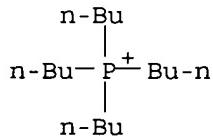
CMF C2 F6 N O4 S2



CM 2

CRN 15853-37-9

CMF C16 H36 P



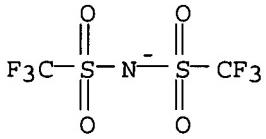
RN 547718-94-5 CAPLUS

CN Phosphonium, tetraoctyl-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 98837-98-0

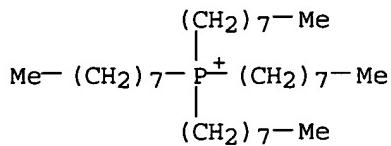
CMF C2 F6 N O4 S2



CM 2

CRN 45308-00-7

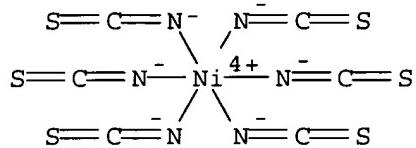
CMF C32 H68 P



RN 855788-65-7 CAPLUS
 CN INDEX NAME NOT YET ASSIGNED

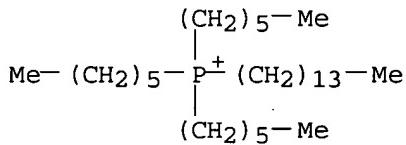
CM 1

CRN 855788-64-6
 CMF C6 N6 Ni S6
 CCI CCS



CM 2

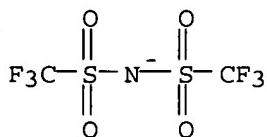
CRN 374683-43-9
 CMF C32 H68 P



RN 855788-71-5 CAPLUS
 CN Phosphonium, tributyltetradecyl-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 98837-98-0
 CMF C2 F6 N O4 S2



CM 2

CRN 91582-83-1
 CMF C26 H56 P

Me—(CH₂)₁₃—P+(Bu-n)3

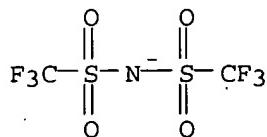
RN 855788-72-6 CAPLUS

CN Phosphonium, tetraphenyl-, salt with 1,1,1-trifluoro-N-[trifluoromethyl]sulfonyl)methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 98837-98-0

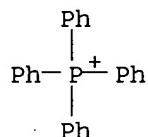
CMF C2 F6 N O4 S2



CM 2

CRN 18198-39-5

CMF C24 H20 P



RE.CNT 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L32 ANSWER 3 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2004:964547 CAPLUS

DN 141:417632

TI Reversible electro-optic device employing aprotic molten salts and method
IN Warner, Benjamin P.; McCleskey, T. Mark; Burrell, Anthony K.; Hall, Simon B.

PA The Regents of The University of California, USA

SO U.S. Pat. Appl. Publ., 15 pp.

CODEN: USXXCO

DT Patent

LA English

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---------------|--|----------|-----------------|----------|
| PI | US 2004223207 | A1 | 20041111 | US 2003-430780 | 20030505 |
| | US 6862125 | B2 | 20050301 | | |
| | WO 2004099863 | A2 | 20041118 | WO 2004-US7643 | 20040311 |
| | WO 2004099863 | A3 | 20050414 | | |
| | W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | |
| | RW: | BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, | | | |

BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,
 ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
 SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN,
 TD, TG

| | | | | |
|---------------|----|----------|----------------|-------------|
| US 2004227983 | A1 | 20041118 | US 2003-430780 | A 20030505 |
| | | | US 2004-831572 | 20040422 |
| | | | US 2003-430780 | A3 20030505 |

OS MARPAT 141:417632

AB Reversible electrooptical devices (e.g., reversible electrodeposited mirrors) that comprise a chamber and, as the medium of variable transmittance to light, a solution of an aprotic molten salt, ≥1 soluble metal-containing species comprising metal capable of being electrodeposited, and ≥1 anodic compound capable of being oxidized are described in which the solution comprises anions which do not bind strongly enough to the metal-containing species to form metal complexes with the anions. Preferably, the aprotic molten salt is liquid at room temperature and includes lithium and/or

quaternary ammonium cations, and anions selected from trifluoromethylsulfonate, bis(trifluoromethylsulfonyl)imide, bis(perfluoroethylsulfonyl)imide, and tris(trifluoromethylsulfonyl)methide. The devices may also employ UV stabilizers and stiffening agents (e.g., polymers) and thixotropic agents. The molten salt solution may include an aprotic organic cosolvent with a b.p. >150°.

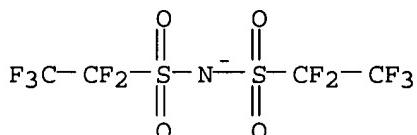
IT 129318-46-3D, Bis(perfluoroethylsulfonyl)imide, compds.

391611-04-4

RL: CPS (Chemical process); DEV (Device component use); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses)
 (reversible electrodeposition-based electrooptical devices employing aprotic molten salts)

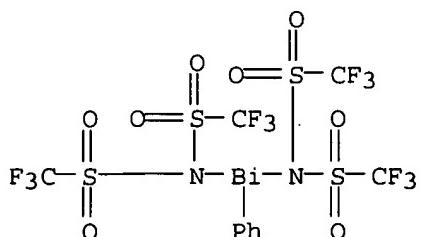
RN 129318-46-3 CAPLUS

CN Ethanesulfonamide, 1,1,2,2,2-pentafluoro-N-[(pentafluoroethyl)sulfonyl]-, ion(1-) (9CI) (CA INDEX NAME)



RN 391611-04-4 CAPLUS

CN Methanesulfonamide, N,N'-(phenylbismuthylene)bis[1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]]- (9CI) (CA INDEX NAME)



IT 174899-83-3P 223437-11-4P

RL: DEV (Device component use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
 (reversible electrodeposition-based electrooptical devices employing aprotic molten salts)

RN 174899-83-3 CAPLUS

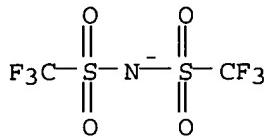
CN 1H-Imidazolium, 1-butyl-3-methyl-, salt with 1,1,1-trifluoro-N-

[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 98837-98-0

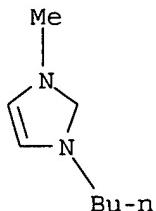
CMF C2 F6 N O4 S2



CM 2

CRN 80432-08-2

CMF C8 H15 N2



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

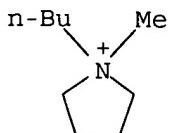
RN 223437-11-4 CAPLUS

CN Pyrrolidinium, 1-butyl-1-methyl-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 223437-10-3

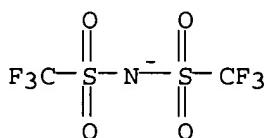
CMF C9 H20 N



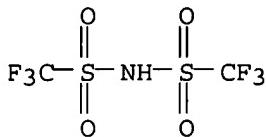
CM 2

CRN 98837-98-0

CMF C2 F6 N O4 S2



IT 90076-65-6, Lithium bis(trifluoromethylsulfonyl)imide
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reversible electrodeposition-based electrooptical devices employing
 aprotic molten salts)
 RN 90076-65-6 CAPLUS
 CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-,
 lithium salt (9CI) (CA INDEX NAME)



● Li

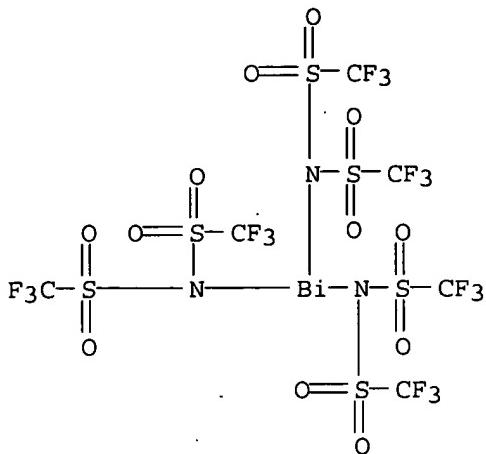
RE.CNT 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L32 ANSWER 4 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2004:876441 CAPLUS
 DN 141:366032
 TI Preparation of aromatic ketones using carboxylic acids as acylation
 agents, and acylation catalysts for the process
 IN Shimada, Shigeru; Kawamura, Masato
 PA National Institute of Advanced Industrial Science and Technology, Japan
 SO Jpn. Kokai Tokkyo Koho, 13 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------|------|----------|--------------------------------|----------------------|
| PI JP 2004292365 | A2 | 20041021 | JP 2003-86968
JP 2003-86968 | 20030327
20030327 |

OS CASREACT 141:366032; MARPAT 141:366032
 AB Aromatic ketones are prepared by acylation of aromatic compds. with carboxylic
 acids in the presence of catalytic amount of Lewis acid catalysts of MXm.Ln
 [M = ion of Bi, Ga, In, Hf, rare earth element; X =
 bis(perfluoroalkanesulfonyl)amide anion; m = valency of M; n = 0-10].
 Thus, p-xylene was treated with hexanoic acid and Bi[N(SO₂CF₃)₂]₃ in a
 sealed reactor at 180° for 45 h to give 67% 1-(2,5-dimethylphenyl)-
 1-hexanone.

IT 391611-05-5
 RL: CAT (Catalyst use); USES (Uses)
 (preparation of aromatic ketones by acylation by carboxylic acids with Lewis
 acid catalysts)
 RN 391611-05-5 CAPLUS
 CN Methanesulfonamide, N,N',N'''-bismuthylidynetris[1,1,1-trifluoro-N-
 [(trifluoromethyl)sulfonyl]- (9CI) (CA INDEX NAME)



L32 ANSWER 5 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2004:549705 CAPLUS

DN 141:89011

TI Preparation of 4-(thio)chromanones from 3-phenoxy- or 3-phenylthiopropionic acids

IN Shimada, Shigeru; Choi, Dong-hai

PA National Institute of Advanced Industrial Science and Technology, Japan

SO Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---------------|------|----------|-----------------|----------|
| PI | JP 2004189695 | A2 | 20040708 | JP 2002-362193 | 20021213 |
| | | | | JP 2002-362193 | 20021213 |

OS CASREACT 141:89011; MARPAT 141:89011

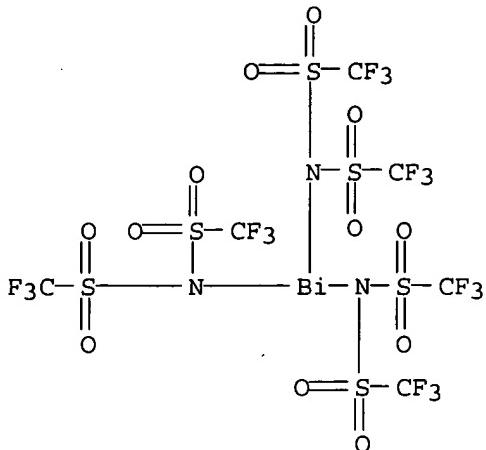
AB 4-(Thio)chromanones I (R1-R8 = nonreactive group; A = O, S), useful as intermediates for physiol. active substances, are prepared by cyclocondensation of 3-phenoxy- or 3-phenylthiopropionic acids II (R1-R8, A = same as above) in the presence of catalytic amount of Lewis acids MX_m.Ln (M = Bi, Ga, In, Hf, rare earth metal; X = anion; L = neutral ligand; m = valency of M; n = 0-10). Thus, 3-phenoxypropionic acid was treated with Bi[N(SO₂CF₃)₂]₃ in p-xylene at 180° for 20 h to give 53% 4-chromanone.

IT 391611-05-5

RL: CAT (Catalyst use); USES (Uses)
(preparation of (thio)chromanones from propionic acids with Lewis acid catalysts)

RN 391611-05-5 CAPLUS

CN Methanesulfonamide, N,N',N'''-bismuthylidynetris[1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]- (9CI) (CA INDEX NAME)



L32 ANSWER 6 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2004:549675 CAPLUS

DN 141:106282

TI Preparation of ring-condensed cyclic ketones from 4-arylbutyric acids

IN Shimada, Shigeru; Choi, Dong-hai

PA National Institute of Advanced Industrial Science and Technology, Japan

SO Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---------------|------|----------|-----------------|----------|
| PI | JP 2004189620 | A2 | 20040708 | JP 2002-356135 | 20021209 |
| | | | | JP 2002-356135 | 20021209 |

OS MARPAT 141:106282

AB Cyclic ketones I (R1-R6 = group not involved in reaction; ring A = monocyclic or condensed polycyclic aromatic ring optionally containing N, O, or O

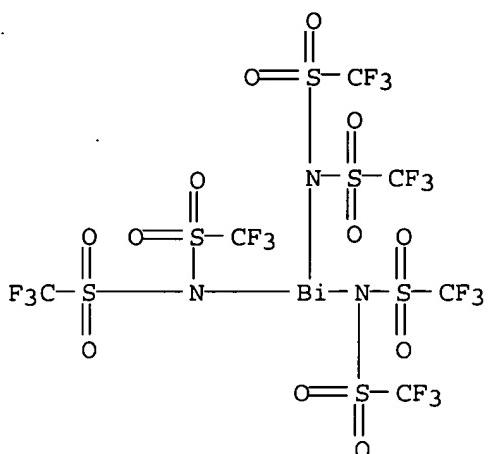
or substituent not involved in reaction), useful as intermediates for drugs and agrochems., are prepared by cyclizing arylbutyric acids II (R1-R6 = same as above) in the presence of Lewis acids MXm.Ln (M = Bi, Ga, In, Hf, rare earth element; X = anion; L = neutral mol. capable of coordinating to M; m = valency of M; n = 0-10). Thus, a mixture of Ph(CH₂)₃CO₂H, Bi[N(SO₂CF₃)₂]₃, and toluene was heated at 180° for 7 h to give 97% 1-tetralone.

IT 391611-05-5

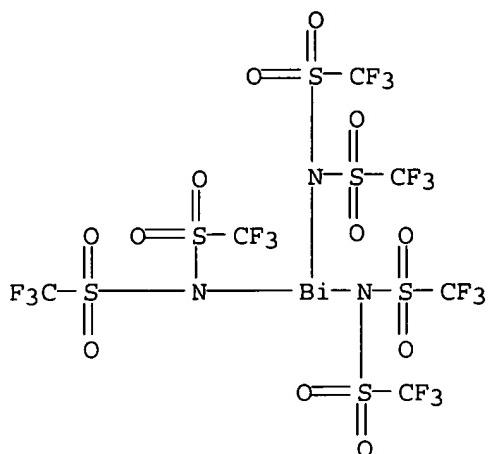
RL: CAT (Catalyst use); USES (Uses)
(preparation of ring-condensed cyclohexanones by intramol. cyclization of 4-arylbutyric acids using specific Lewis acids)

RN 391611-05-5 CAPLUS

CN Methanesulfonamide, N,N',N'''-bismuthylidynetris[1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]- (9CI) (CA INDEX NAME)



L32 ANSWER 7 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2003:345273 CAPLUS
 DN 139:230446
 TI Synthesis of 1-tetralones by intramolecular Friedel-Crafts reaction of 4-arylbutyric acids using Lewis acid catalysts
 AU Cui, Dong-Mei; Kawamura, Masato; Shimada, Shigeru; Hayashi, Teruyuki; Tanaka, Masato
 CS National Institute of Advanced Industrial Science and Technology (AIST), Tsukuba, Ibaraki, 305-8565, Japan
 SO Tetrahedron Letters (2003), 44(21), 4007-4010
 CODEN: TELEAY; ISSN: 0040-4039
 PB Elsevier Science Ltd.
 DT Journal
 LA English
 OS CASREACT 139:230446
 AB Intramol. Friedel-Crafts reaction of 4-arylbutyric acids efficiently proceeded in the presence of catalytic amts. of Lewis acids such as Bi(NTf₂)₃ and M(OTf)₃ (M=Bi, Ga, In and rare-earth metals) to form 1-tetralones. Chroman-4-one and thiochroman-4-one were also obtained in good yields from 3-phenoxypropionic acid and 3-phenylthiopropionic acid, resp.
 IT 391611-05-5
 RL: CAT (Catalyst use); USES (Uses)
 (preparation of 1-tetralones by intramol. Friedel-Crafts reaction of 4-arylbutyric acids using Lewis acid catalysts)
 RN 391611-05-5 CAPLUS
 CN Methanesulfonamide, N,N',N''-bismuthylidynetris[1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]- (9CI) (CA INDEX NAME)



RE.CNT 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L32 ANSWER 8 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2002:757315 CAPLUS

DN 137:239065

TI Electrochemical preparation method for metallic salts

IN Dunach, Clinet Isabel; Favier, Isabelle; Hebrault, Dominique; Desmurs, Jean Roger

PA Rhodia Chimie, Fr.; Rhodia Poulenc Chimie

SO Fr. Demande, 20 pp.

CODEN: FRXXBL

DT Patent

LA French

FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|----------|
| PI FR 2818994 | A1 | 20020705 | FR 2000-17316 | 20001229 |
| | B1 | 20040109 | | |
| | | | FR 2000-17316 | 20001229 |

AB The invention concerns electrochem. preparation method for metallic salts of formulas: $[(\text{RfSO}_2(\text{O})\text{a})\text{c}(\text{N})\text{b}]^n\text{X}^+$ where Rf is organic radical CmH_{2m+1} with $m=1-7$, a and b are different one from another, varying from 0 to 1, and when $a=1$, $c=1$ and when $a=0$, $c=2$; n changes from 1 to 6, and X is metallic element by electrolysis of solution of substrate of formulas:

$[(\text{RfSO}_2(\text{O})\text{a})\text{c}(\text{N})\text{b}]\text{H}$. The process is carried out in the one compartment electrolytic cell with sacrificial anode from metal "X" of salt prepared, using polar organic solvent with dielec. constant ≥ 8 .

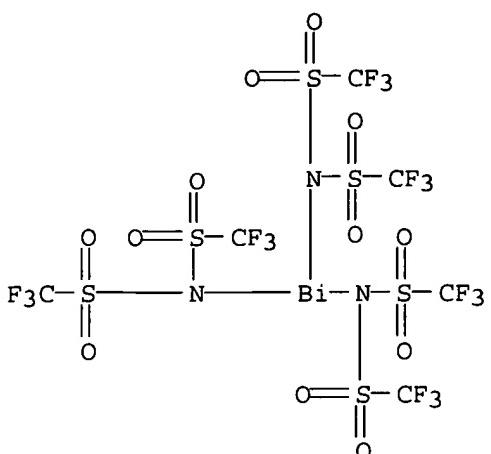
IT 391611-05-5P

RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); PNU (Preparation, unclassified); PREP (Preparation); PROC (Process)

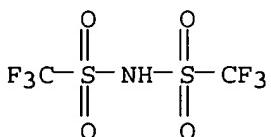
(electrochem. preparation by electrolysis of trifluoro-N-
[(trifluoromethyl)sulfonyl with sacrificial anode)

RN 391611-05-5 CAPLUS

CN Methanesulfonamide, N,N',N''-bismuthylidynetris[1,1,1-trifluoro-N-
[(trifluoromethyl)sulfonyl]- (9CI) (CA INDEX NAME)

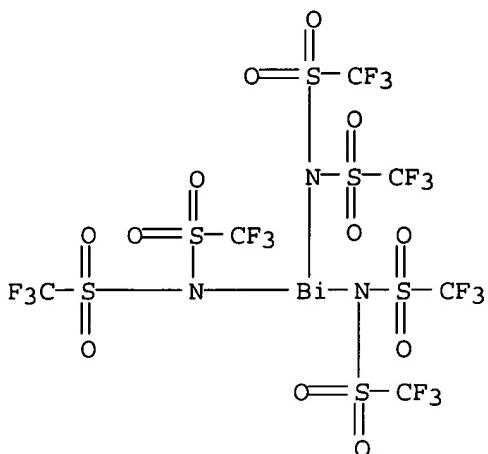


IT 82113-65-3DP, Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, salts
 RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); PNU (Preparation, unclassified); PREP (Preparation); PROC (Process)
 (electrochem. preparation method for metallic salts by electrolysis of trifluoro-N-[(trifluoromethyl)sulfonyl] with sacrificial anode)
 RN 82113-65-3 CAPLUS
 CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]- (9CI)
 (CA INDEX NAME)



L32 ANSWER 9 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2002:651299 CAPLUS
 DN 138:18769
 TI Bismuth(III) bis(trifluoromethanesulfonyl)amide
 AU Picot, Alexandre; Repichet, Sigrid; Le Roux, Christophe; Dubac, Jacques;
 Roques, Nicolas
 CS Heterochimie fondamentale et appliquee (UMR-CNRS 5069), Universite
 Paul-Sabatier, Toulouse, 31062, Fr.
 SO Journal of Fluorine Chemistry (2002), 116(2), 129-134
 CODEN: JFLCAR; ISSN: 0022-1139
 PB Elsevier Science B.V.
 DT Journal
 LA English
 AB Bi(III) bis(trifluoromethanesulfonyl)amide Bi(NTf₂)₃ (2) was prepared from the reaction of protiodemetalation of tri-p-tolylbismuth by a stoichiometric amount of bis(trifluoromethanesulfonyl)amine (1). The intermediates BiPh_{3-n}(NTf₂)_n (n = 2, 1) resulting from the reaction of 1 with Ph₃Bi also were isolated. The amide 3 was able to catalyze the benzoylation and the benzenesulfonylation of toluene.
 IT 391611-05-5P
 RL: CAT (Catalyst use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
 (preparation and benzoylation and benzenesulfonylation catalysts for toluene)
 RN 391611-05-5 CAPLUS

CN Methanesulfonamide, N,N',N''-bismuthylidynetris[1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]- (9CI) (CA INDEX NAME)

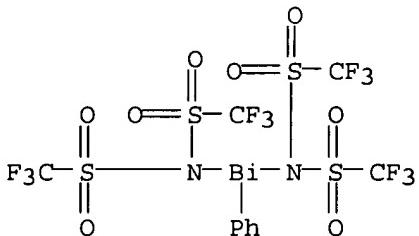


IT 391611-04-4P 477530-12-4P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

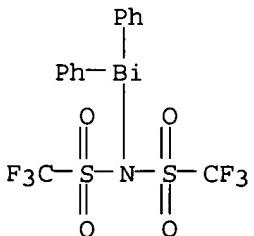
RN 391611-04-4 CAPLUS

CN Methanesulfonamide, N,N'- (phenylbismuthylene)bis[1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]- (9CI) (CA INDEX NAME)



RN 477530-12-4 CAPLUS

CN Methanesulfonamide, N-(diphenylbismuthino)-1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]- (9CI) (CA INDEX NAME)

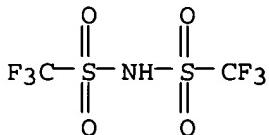


IT 82113-65-3, Bis(trifluoromethanesulfonyl)amine

RL: RCT (Reactant); RACT (Reactant or reagent)
(reactant for preparation of bismuth bis(trifluoromethanesulfonyl)amide
with/without Ph)

RN 82113-65-3 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]- (9CI) (CA INDEX NAME)

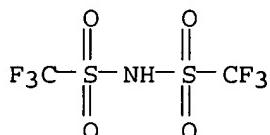


RE.CNT 62 THERE ARE 62 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

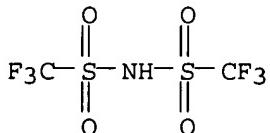
| L32 | ANSWER 10 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN | | | |
|---|---|----------|-----------------|------------|
| AN | 2002:71946 CAPLUS | | | |
| DN | 136:120209 | | | |
| TI | Composition and compound based on salts of metals and acids having a sulfonyl group borne by a perhalogenated carbon and their use as Lewis acid catalysts | | | |
| IN | Roques, Nicolas; Dubac, Jacques; Le Roux, Christophe; Repichet, Sigrid; Bernard, Jean-Marie; Maestro, Jean-Pierre; Vidal, Thierry; Peyronneau, Magali; Picot, Alexandre; Mazieres, Stephane | | | |
| PA | Rhodia Chimie, Fr. | | | |
| SO | PCT Int. Appl., 47 pp. | | | |
| | CODEN: PIXXD2 | | | |
| DT | Patent | | | |
| LA | French | | | |
| FAN.CNT 1 | | | | |
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
| PI WO 2002005954 | A1 | 20020124 | WO 2001-FR2289 | 20010713 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| | | | FR 2000-9213 | A 20000713 |
| | | | US 2000-217923P | P 20000713 |
| | | | FR 2000-17310 | A 20001229 |
| | | | FR 2001-9213 | A 20010711 |
| FR 2811592 | A1 | 20020118 | FR 2000-9213 | 20000713 |
| FR 2811592 | B1 | 20020830 | | |
| FR 2818980 | A1 | 20020705 | FR 2000-17310 | 20001229 |
| FR 2818980 | B1 | 20030418 | | |
| FR 2827195 | A1 | 20030117 | FR 2001-9213 | 20010711 |
| CA 2409421 | AA | 20020124 | CA 2001-2409421 | 20010713 |
| | | | FR 2000-9213 | A 20000713 |
| | | | US 2000-217923P | P 20000713 |
| | | | FR 2000-17310 | A 20001229 |
| | | | FR 2001-9213 | A 20010711 |
| | | | WO 2001-FR2289 | W 20010713 |
| EP 1301275 | A1 | 20030416 | EP 2001-954096 | 20010713 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | |
| | | | FR 2000-9213 | A 20000713 |
| | | | FR 2000-17310 | A 20001229 |
| | | | FR 2001-9213 | A 20010711 |
| | | | WO 2001-FR2289 | W 20010713 |
| JP 2004503379 | T2 | 20040205 | JP 2002-511882 | 20010713 |
| | | | FR 2000-9213 | A 20000713 |
| | | | FR 2000-17310 | A 20001229 |

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|---------------|----|----------|-----------------|------------|
| US 2004116733 | A1 | 20040617 | FR 2001-9213 | A 20010711 |
| | | | WO 2001-FR2289 | W 20010713 |
| | | | US 2001-903635 | 20010713 |
| | | | US 2000-217923P | P 20000713 |
| | | | FR 2000-17310 | A 20001229 |

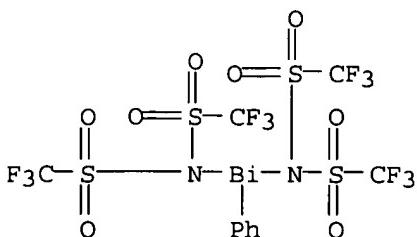
OS MARPAT 136:120209
 AB Title salts have elements of valence (μ) ≥ 3 and have, as coanions, ≥ 1 and $\leq (\mu-1)$ anions bearing a sulfonyl function borne by a perhalogenated atom, preferably perfluorinated, more preferably, a perfluoromethylene group. The invention is applicable to catalysis involving electrophilic cations, with these salts to replace previously used triflate salts. BiCl(OTf)2 (Tf = CF₃SO) was manufactured by heating 9.11 g BiCl₃ 1.5 h at 110° with 10.5 g TfOH in PhMe.
 IT 82113-65-3, Bis(trifluoromethanesulfonyl)amine
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (catalyst precursor; salts of metals and acids having sulfonyl groups borne by perhalogenated carbons for Lewis acid catalysts)
 RN 82113-65-3 CAPLUS
 CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]- (9CI)
 (CA INDEX NAME)



IT 82113-65-3DP, Bis(trifluoromethanesulfonyl)amine, reaction products with metal compds. 391611-04-4P 391611-05-5P
 RL: CAT (Catalyst use); IMF (Industrial manufacture); PREP (Preparation); USES (Uses)
 (salts of metals and acids having sulfonyl groups borne by perhalogenated carbons for Lewis acid catalysts)
 RN 82113-65-3 CAPLUS
 CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]- (9CI)
 (CA INDEX NAME)

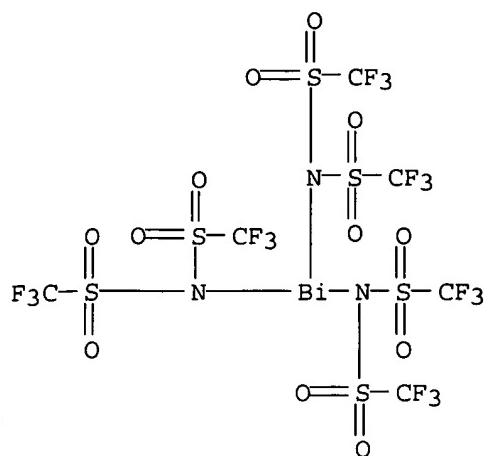


RN 391611-04-4 CAPLUS
 CN Methanesulfonamide, N,N'-(phenylbismuthylene)bis[1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]- (9CI) (CA INDEX NAME)



RN 391611-05-5 CAPLUS

CN Methanesulfonamide, N,N',N''-bismuthylidynetris[1,1,1-trifluoro-N-
[(trifluoromethyl)sulfonyl]- (9CI) (CA INDEX NAME)



RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

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